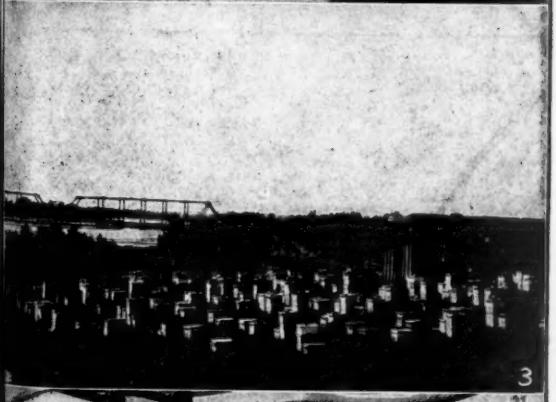


AMERICAN BEE JOURNAL

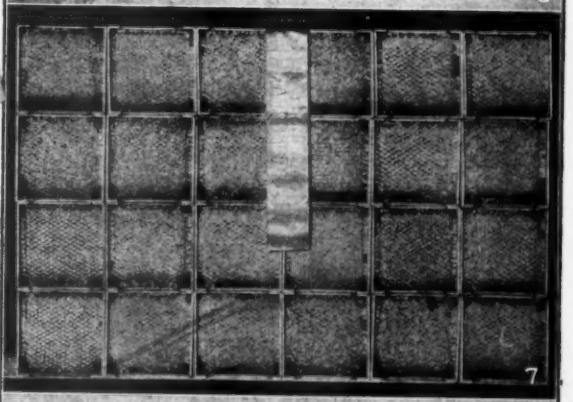
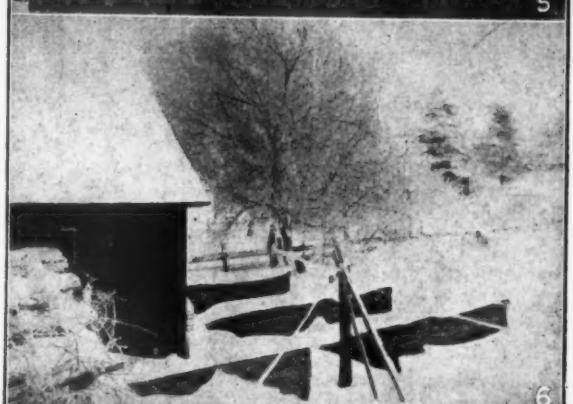
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American Bee Journal



PUBLISHED MONTHLY BY
GEORGE W. YORK & COMPANY
117 N. Jefferson Street, Chicago, Ill.

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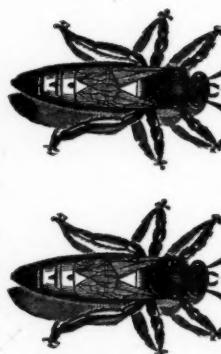
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Published Monthly at \$1.00 a Year, by George W. York & Company, 117 North Jefferson Street,

GEORGE W. YORK, Editor.
DR. C. C. MILLER, Associate Editor.

CHICAGO, ILL., FEBRUARY, 1911

Vol. LI--No. 2

EDITORIAL COMMENTS

The Name "Extracted Honey"

Quite a lengthy editorial in *Gleanings in Bee Culture* is devoted to discussing the "Nomenclature of Honey; Shall We 'Stand Pat' on 'Extracted'?" About 25 years ago this subject was pretty thoroughly gone over in these columns, and after occupying considerable space, we believe it was found that no better term could be agreed upon than "Extracted Honey" for that kind of honey.

Mr. P. W. Richards, of New Mexico, suggests "separated" honey, and calling the extractor a "separator," to correspond with cream-separator. Editor Root says this appeals to him much more than "extracted" and "extractor." But they, or the processes, are not similar at all. The *cream* is separated from the *milk*. Could you separate *honey* from *honey*? Hardly.

It seems to us that in view of the long use of the name, and that the honey has really been extracted (removed) from the honey-combs by a honey-extractor, "Extracted Honey" is a good name for that article. We doubt if it would be worth while to occupy valuable space with a further discussion of the subject.

Early Cessation of Brood-Rearing

There is probably many a bee-keeper with years of experience who has never realized how early in the season brood-rearing may cease, especially where there is no fall flow. Nor is it always, if indeed ever, that brood-rearing has ceased because the queen has ceased to lay. Close observation is likely to show in the fall that sealed brood is present, and also eggs. That means that although the queen keeps on laying, the bees no longer do any feeding. A striking instance of the early cessation of brood-rearing is given in the *British Bee Journal*. Mr. W. Herrod had, in the season of 1910, "examined

colonies in August in which the queens had given up laying altogether. In one apiary of nearly 300 colonies he did not find more than 13 or 14 with brood, simply because stores had ceased to come in. In such colonies there would be a good many old bees going into winter quarters, and undoubtedly there would be much spring dwindling the following year."

Fortunately such extreme cases are not common, but whenever the honey-flow ceases quite early it may be a good thing to feed enough to keep up brood-rearing. After the queen has actually stopped laying, it may need continuous feeding for some time to get her started again, especially if she is old. Mr. Herrod believes it is a good thing in such a case to requeen in the fall.

Australian Bee-Bulletin on Foul Brood

By the time they reach the other side of the globe the views held by American bee-keepers with regard to foul brood seem to become somewhat distorted; at any rate, one would think so after reading the following from the Australian Bee-Bulletin:

"American bee-keepers make a distinction between European and American foul brood. The former is said to affect the unsealed larvae, the latter affects the sealed brood when it develops into a nymph."

Australian readers will naturally understand from that that American bee-keepers hold the view that in one kind of foul brood only unsealed larvae are affected, and in the other kind only nymphs. So far from that being the case, they believe that although in the European the most of the diseased brood is attacked earlier than in American, yet that both sealed and unsealed brood are affected in each, and that nymphs have not much to do with the case. Editor Abram further says:

"I have yet to learn that American foul brood differs from European.....When

American scientists can show us that there is one disease distinct to Europe, and another to America, well and good; but theory and practice must agree in any case. In the meantime I shall consider the disease in two stages, just as dwindling and paralysis vary in degree only. But all American bee-keepers are not of the same opinion as a few are, and thus the matter is not all American."

Where in the world did Mr. Abram get the idea that American scientists teach one form of foul brood is found only in Europe and the other kind only in America? Whatever may be in Europe, he must be a very careless reader of American bee-papers who thinks that only one kind is to be found in this country. So if Mr. Abram is waiting until it is proven by scientists that American stays in America, and European in Europe, he will never be convinced that there are two distinct diseases under the name of foul brood.

Of course there is no law against his considering the two diseases only one disease in two stages, but it doesn't need a scientist to point out differences that any every-day bee-keeper with two good eyes can see. The stringing out of the brood 1, 2, or more inches that is found in American is not found in European, no matter how far advanced the disease may be. In American, no matter in what stage the disease may be, the dead larva dries down like glue; in European, no matter in what stage the disease may be, the mummified larva may be separated from the cell-wall.

Just what is meant by saying that "dwindling and paralysis vary in degree only," it is not easy to understand. Possibly there is a difference in nomenclature in the two countries, for if dwindling and paralysis mean the same there as here, it is hard to believe that Mr. Abram could possibly think that they "vary in degree only."

If, when Editor Abram says that "all American bee-keepers are not of the same opinion as a few are," he means that only a few American bee-keepers believe that American and European foul brood are two distinct diseases, he needs to be better informed. American bee-keepers may be divided in opinion as to the best method of treatment, but as to the fact of there being two separate and distinct diseases, a somewhat close familiarity with American bee-literature fails to bring to

American Bee Journal

mind a single exception to the rule that American bee-keepers believe the two diseases are *not* the same disease in two different stages. If Mr. Abram knows of such an exception will he kindly produce it?

Workers Reared in Drone-Comb

In a foot-note in the British Bee Journal, the editor says:

Our own experience with queens confined on drone-comb has been that they can lay eggs which produce workers. We recollect seeing a colony having only drone-comb at Dr. Bianchetti's apiary in Ornavasso. In this case, when the swarm was first placed on the combs, the queen was for some time reluctant to lay, but at last gave in to the inevitable, and when we inspected the hive she was laying eggs which produced only workers, and there were no drones present.

It may be interesting to inquire as to that reluctance of the queen to lay. We may suppose that she did not want to lay drone-eggs, and it is probably the case that she was unable to lay worker-eggs in unmodified drone-cells. So she had to wait until the workers had time to modify the cells by contracting the mouth of the cells with additional wax. There have been a good many reports of worker-eggs being laid in drone-cells, but probably no case has yet been found in which the bees have not first narrowed the mouths of the cells.

Foundation a Time-Saver and Work-Saver

A common argument in favor of using full sheets of foundation is that it saves the time of the bees, but not so much is said of the saving of work. D. M. Macdonald says in the British Bee Journal:

"Not only is it a time-saver, but it is also a work-saver. Work ages bees more than the few weeks they may live during the active season. Thus we save the valuable lives of our bees at a season when it is of the utmost importance that our colonies should be at their strongest. If a few thousand bees are busy toilsomely evolving wax from the garnered sweets, constructing with that hard-won solid the delicate and dainty fabric of the hexagonal cells, to the number it may be of 50,000, it stands to reason that just so many thousands should go out foraging to the fields which are then white as to harvest. Liberate these thousands by the shorter process produced by a free use of foundation, and you save a vast amount of labor on the part of your toiling thousands, eager to profit by each shining hour."

Different Races of Bees

Gleanings gives the experience of their Mr. Jas. W. Bain with several different races of bees, which experience he had before going to Medina.

Contrary to the opinion of many, he values Carniolans highly. They protect their hives as well as Italians, cap their honey snowy white, and although greatly given to swarming when kept in small hives, they can be kept within bounds in large hives. Carniolan queens are more difficult to find than Italians.

Banats have many of the good qualities of the Carniolans, but resemble blacks more closely than do the Carniolans, making it difficult to keep them separate from the blacks.

Mr. Bain agrees with the general verdict as to the viciousness of Cyprian bees.

Golden Italians are, as a rule, more irritable than the leather-colored, but they cap their honey whiter.

After reading so much about the marvelous gentleness of Caucasians, one reads with no small surprise the following:

Mr. Bain finds hardly one redeeming feature among the Caucasians, although they do cap honey white. In spite of the claims made as to the gentleness of these bees, they are nervous in their actions, and a good many of the colonies of this race are very difficult to handle on account of their tendency to sting on the slightest provocation. These bees are excessive propolizers, and no better honey-gatherers than the average Italians. One point that we do not remember having seen mentioned is this: It is much more difficult to introduce a new queen to a colony of Caucasians than to Italians, for instance. They will start cells in spite of all that can be done, and about the only way is to remove all brood or else wait until the brood is so far along that cell-starting is out of the question.

The widely diverging views as to different races of bees may no doubt be largely accounted for by the fact that there may be quite a wide difference between individual colonies of the same race.

The Rewards of Bee-Keeping

In a previous number I challenged the statement that for the amount invested bee-keeping gave greater returns than any other business, leaving it for another time to tell why I would still be a bee-keeper.

If money were the only thing to work for, I certainly would not choose bee-keeping. But there are other rewards besides money, and outside the Christian ministry I know of no calling that has greater rewards than bee-keeping, for one who has the proper taste for it.

That matter of taste for one's business is a pretty big factor in the problem, and I'm taking that into account in all I say. If any one has no taste for bee-keeping, then the reasons I give for preferring it to any other secular pursuit will not all appeal to him.

I think I will do well to quote here a word from the Canadian Bee Journal. W. W., in a biographical sketch of Mr. J. L. Byer, says:

"None of us regard bee-keeping as a means of getting rich quickly. The real bee-keeper—the genuine article—is an optimist and likewise a philosopher. The chief consideration with him is not how much money there is in bee-keeping, but how

much real happiness can be extracted from his profession."

And from this point of view he thinks Mr. Byer is a rich man.

A sick man is in poor condition to extract happiness out of anything, and a man in perfect health is a good extractor of happiness almost anywhere. One strong point in favor of bee-keeping is that it is a healthy business. The bee-keeper is much of the time out in God's free air and sunshine, with the right kind of exercise to make his food taste good and digest readily.

Many a prosperous business man will tell you he is eagerly looking forward to the time when he can retire from business and enjoy life. Your true bee-keeper has no such feeling. He doesn't need to make his pile before he begins to enjoy life. He is enjoying life every day as he goes along.

The bee-keeper's life never becomes monotonous. There are always new things to try; always new problems to solve.

Bee-keeping is conducive to long life. I could probably have made more money in another line of business, but I would be dead now, and what's money to a dead man? Not only does bee-keeping lengthen a man's life, but it lengthens the span of his efficiency. In many lines of business a man is laid on the shelf when he reaches the age of 60; in some lines sooner. Age is not so much of a handicap in bee-keeping. The largest crop of honey I ever harvested was when I was 77 years old. In a good many lines, when a man no longer can work at full pressure, he must give up the business entirely. It's full work or nothing. If a bee-keeper at 60 can not keep as many bees as he could at 40, he can keep a less number, and a still less number at 70.

In not many lines of business does a man have the chance to be at home with his family so much as the bee-keeper. Perhaps that counts with me more than it otherwise would, because for a time I made my living as a traveling man. It could hardly be called living.

With the chance to get more happiness out of each day so long as my days last, and with the chance to have them last longer than in any other business, why shouldn't I be a bee-keeper?

C. C. M.

MISCELLANEOUS NEWS ITEMS



Our Front-Page Pictures.—The 8 different views on our front-page this month are described as follows:

Nos. 1, 2, 5 and 6.—Apiary Views of John H. Bamberger

These views show my way of arranging colonies in summer and protecting them in winter, which has been satisfactory, as I have had no winter losses the past 2 winters. So far this winter I have no cause for complaint, as on Monday, Jan. 23, all but 3 out of 32 colonies were making good use of the beautiful day by taking a cleansing flight, carrying out dead bees, and causing my wife to sputter on account of their spotting her wash. The hives are spaced about 3 inches

apart when packed for winter, leaving 8 inches on each end.

The sheds (No. 1) are portable, using hooks to fasten the parts to one another. They are 40 inches wide, 12 feet long, and 3 feet high in the front, and 2 feet high in the rear. They rest on pieces of 2x4 to keep the ends off of the ground. The packing used is planer shavings, and while it takes longer to pack and unpack them than it takes to carry them into the cellar and out again, the work is not as arduous, and it gives the pleasure of seeing the bees enjoying themselves when the weather permits, as it did Jan. 23.

The winter scene (No. 6) was taken Jan. 15, 1910, the camera 12 feet above the ground, and about 16 feet from the nearest shed, which gives a fair idea as to the depth of the snow last winter.



American Bee Journal

In the other picture (No. 2) I am "caught in the act" of clipping a queen, and it also shows my bee-dress to an advantage.
Freeport, Ill. JOHN H. BAMBERGER.

No. 3.—Apiary of A. S. Parson

This picture shows one of the apiaries of A. S. Parson, of Rocky Ford, Colo.

No. 7.—Premium Honey of J. C. Frank

This represents 1st Premium honey at the Kansas State Fair, shown by Mr. J. C. Frank, of Dodge City, Kan.

No. 8.—Apiary of A. L. Beaudin

Mr. Beaudin is a bee-keeper at St. Chrysostome, Quebec, Canada. In 1910, he increased from 180 colonies in the spring to 254 good colonies in the fall, and took 26,000 pounds of extracted honey. All his bees were in one apiary. He winters them in the cellar.

No. 4.—Apiary of H. N. Simmons, of Yuma, Ariz.

Among the numerous specialized industries which are taking root, and which promise a large measure of success on many of the irrigation projects of the Reclamation Service, is the production of honey.

During a recent trip covering nearly all the reclamation projects, the Statistician of the Reclamation Service at Washington, D. C., made an investigation of this industry. On a large number of the projects the apiaries were only just being established. Those that had been in operation a year or more almost without exception reported an abundance of pasture for bees, favorable climatic conditions, and a very fine grade of honey, for which there was a good demand. The white sage honey was an especial favorite on the Coast.

As the cultivated acreage increases on the projects, adding large areas of alfalfa, orchards and small fruits, the pasture will take care of more bees. Development of agriculture, of course, promotes the growth of towns and villages, and creates a home market. In most sections the supply has not kept up with the demand. By co-operation among apiarists to produce best grades, and to create new markets through intelligent advertising, bee-culture will become one of the most profitable industries in the once desert country. As everything in the arid country is tending toward specialization, the bee-men must get together on a plan similar to that now in operation among the fruit-growers, establishing high standards, and by rigid regulation insure the marketing under special label, of only first-class honey.

There is a wide field for the bee-man in the West, and nearly all of the projects of the Government offer opportunities which are worthy of consideration.

Honey East and West.—In the United States the large shipments of honey are mainly from the West to the East. In Canada the reverse obtains. At the Ontario convention, the president referred in his address, as reported in the Canadian Bee Journal, to the fact that the call for honey from the West was on the increase, being greater last year than ever before, one bee-keeper having received from one firm an order for 5 cars of honey, and that at good prices, and practically before the honey was produced.

A New Course in Bee-Keeping.—

We learn that Syracuse University, Syracuse, N. Y., proposes to give a short course in bee-keeping during the coming spring. The University is now planning to add courses in agriculture to its present curriculum, and in the zoological department courses devoted to a study of the animals of interest to the farmer will be given. The course in apiculture will be one of the first opened to students.

For the first year the course will consist of only 4 or 5 lectures with demonstrations, which will probably be given by some of the leading bee-keepers of that part of New York. The University is admirably located to give such a course, for some of the best bee-keepers in the East are near enough to help. As the equipment is increased and the facilities for such work are improved the course will be lengthened. The department is very wise in making a small beginning, so that the course may be of the highest rank from the very first.

This is, as far as we know, the first time that any educational institution in the country outside of a State Agricultural College has attempted such a course. The bee-keepers of New York State are to be congratulated, and the University commended for this step. Without doubt the course will be of interest to many students, and it is hoped that the New York bee-keepers will materially support the effort.

Far Western Bee-Keeping.—This is the heading of a new department begun in this issue of the American Bee Journal, with Mr. Wesley Foster, of Boulder, Colo., as its conductor. This particular branch of the Foster family have been interested in bee-keeping for a long time, and their years of experience enable Wesley Foster to furnish matter of real value to bee-keepers. His own experience as a bee-keeper, and also honey-salesman, puts him in a position in which he can speak from both sides of the subject—the production of honey and also its disposal.

We are glad to be able to add so worthy a department editor to our columns. It is our aim to improve the old American Bee Journal from time to time, as the months come and go. We should be glad always to receive suggestions from any who think they might be able to make recommendations that would improve the contents of this Journal. We are here to serve the interest of its readers, and wish to give them just the special things that they would like most. The only way we can find out is to invite suggestions.

Falconer Western Branch.—The W. T. Falconer Mfg. Co., of Falconer, N. Y., have opened their Western Branch House on the 2d floor of the building at 117 N. Jefferson St., Chicago, Ill. They will carry a full line of their famous bee-supplies. They have been in the bee-supply business for over 30 years, so are well known, especially in the East. The Western bee-keepers will now have a good opportunity to become acquainted with their splendid line of bee-supplies.

National Convention Report.—A copy of the Report of the 41st meeting of the National Bee-Keepers Association, held at Albany, N. Y., Oct. 12 and 13, 1910, is received at this office. It makes a pamphlet of 140 pages, and contains not only the full report of the last meeting of the Association, but also a financial statement, the Constitution and By-Laws, the work done by the General Manager in the interest of bee-keepers, and also a full list of the membership.

Surely this is a valuable pamphlet, and should be in the hands of every bee-keeper on this Continent. It is mailed free to every member. The National dues are \$1.00. If any bee-keeper reading this notice is not a member, he or she should send \$1.00 to General Manager N. E. France, Platteville, Wis., at once, and thus become a yearly member. The booklet alone is worth the \$1.00, but there are other publications issued by the National Association which will also be mailed to new members on request to the General Manager.

Mr. G. C. Greiner, of La Salle, N. Y., on receipt of a copy of the National Report referred to above, says in a letter to this office:

"The report of the National Bee-Keepers' Association received a day or two ago, is just the thing. I can have the convention over again at any time, all by myself; and the best part of it is, I can understand every word that is said."

Mr. W. H. Laws.—of Beeville, Tex., has been selected a director of the National Bee-Keepers' Association, succeeding Udo Toepperwein, of San Antonio, Tex., who recently resigned. Vacancies in the Board of Directors are filled by the Executive Committee, composed of the President, Vice-President, Secretary, and General Manager, while vacancies in the Executive Committee are filled by the Board of Directors, composed of 12 men. In the first column of the second page of this number of the American Bee Journal will be found a complete list of the Officers and Board of Directors of the National Association.

Don't Give Up Your Bee-Papers.—Here are some wise words from Editor Hutchinson, in the Bee-Keepers' Review:

At the end of the year some subscribers will drop their bee-journals. There are two reasons why I hate to see this done. One is the loss of the subscribers, and the other the subscribers' loss; and the latter is ten-fold greater than the former. No man can know too much about his business. Success comes from knowing how; from doing things the right way. It is not the things we do without that help us to succeed; it's the things we have to work with; and to the bee-keeper no tool is more important than his bee-journal.

Michigan Foul Brood Law.—We have received the following very important notice from E. D. Townsend, president of the Michigan Bee-Keepers' Association:

ATTENTION, MICHIGAN BEE-KEEPERS!

At Grand Rapids last November, at our State meeting, a legislative committee was appointed to draft a new bee-disease bill for Michigan, and introduce it in the legislature now in session. At this date (Jan. 10th) a law is nearly ready to be introduced, and is along the line of the one proposed by Dr.



American Bee Journal

Phillips, of Washington, D. C. We are asking for considerably more money, and a privilege to appoint several inspectors instead of one, as our present law provides. There are but two or three months of the year really good to inspect bees for disease, and one man can do but little in this limited time. We ought to start 10 men out next spring, and will, providing we can get this law passed.

Hon. Geo. E. Hilton, representing the bee-keepers, will go to Lansing this month (January), and introduce the bill. Now, the object of writing this letter is, to ask every Michigan bee-keeper to write to *both* of his representatives, now in Lansing, to lend their support to this bill. If this is not done, we might as well do nothing, for already Gov. Osborn has sent a message to the legislature advising economy in all branches of the legislature, and it will be a hard pull at best to get the bill through. Remember, we are depending upon *you*, and you alone, brother bee-keepers of Michigan, to get this measure through, for it will be *hopeless* unless every one of us lends a helping hand and keep "dinging" at our representatives until they just have to vote for this bill to get rid of us. Let us all *remember our duty*.

Fraternally yours,

E. D. TOWNSEND.

The importance and urgency of this matter cannot be too strongly impressed upon the bee-keepers of Michigan. We hope that every one interested will write his representatives in Lansing at once. Delays are sometimes dangerous. Do it now!

LATER.—After the above was ready to be put in type, we received the following letter to Michigan bee-keepers:

I spent a portion of 3 days in Lansing last week, in perfecting the Foul Brood Bill, and arranging for its introduction, and believe we now have the best Foul Brood Bill yet framed; and the prospects for its passage, with the assistance of the bee-keepers of the State, are very flattering. The State Board of Agriculture are doing all they can to help in the matter, and we are indebted to Prof. Pettitt, our State Entomologist, for valuable advice and assistance.

The Advisory Committee that I asked for, and which was appointed at Grand Rapids, have all made suggestions that have been incorporated, as well as those from Dr. Phillips and Prof. Pettitt. Now if the bee-keepers of the State will write their Representatives and Senators at Lansing, urging their support of the measure, I am very sure the Governor will sign the Bill; I saw him while there, and shall see him again when I go again to talk with the committee to which the Bill will be referred.

Secretary Tyrrell will mail information and advice to the 4000 bee-keepers of Michigan, and I shall hope to see our Representatives at Lansing deluged with letters.

GEO. E. HILTON.

W. Z. Hutchinson. Editor of the Bee-Keepers' Review, who has been sick for some time, and part of the time in the hospital, writing us Jan. 13, had this to say:

"I am slowly improving, but am yet far from well; but it is a good thing to be able to be at home and look after business."

All will rejoice in Mr. Hutchinson's speedy and complete recovery.

Illinois Bee-Keepers—Take Notice!—We have received the following report from the special legislative committee elected at the last meeting of the Illinois State Bee-Keepers' Association:

TO THE ILLINOIS BEE-KEEPERS.

The bee-keepers of the State are hereby notified that the committee of 10, elected in 1906 by the State Association, and the committee of 3, elected in 1910, at the annual meeting, for the purpose of securing legislation, have jointly and unanimously resolved to apply to the legislature for the foul brood law as published in the petition which has been signed by hundreds of bee-keepers.

This is almost identical with the Wisconsin law. The only change which is expected to be made is a demand for an appropriation not to exceed \$100 for the State Bee-Keepers' Association, three-fourths of which is to be available for the extermination of foul brood.

The sum of \$600 has been considered as altogether inadequate, owing to the alarming increase of foul brood in the State.

Bee-keepers all through the State are hereby requested to urge the passage of the law with their representatives and senators. Blank petitions (for signers) with the foul brood law will be forwarded promptly to all who will apply to the Secretary, Jas. A. Stone, Rt. 4, Springfield, Ill.

The Committee on Appropriations has just been announced in yesterday's paper (Jan. 18), and are as follows, giving last names only:

APPROPRIATION (HOUSE) COMMITTEE.

David E. Shanahan, Chicago, Chairman, from 9th District.

Smekal,	Dudgeon,
Kirkpatrick,	Campbell,
Hamilton,	Pervier,
Lewis,	Ireland,
Terrill	Erickson,
Shepherd,	McNichols,
Tice,	Butts,
Marcy,	Carter,
Abbott,	Bardwill,
Wright,	Welborn,
Cooley,	Rawleigh,
Tourtellott,	Jones,
Leavitt,	Mathis,
Winthrop,	Simpson,
Anderson, of Cook,	Atwood,
Martin,	Alexander,
Mitchell,	Wilson,
McLaughlin,	Bolin,
Wheelan,	Donahue,
Morris,	Rapp,
Gorman,	Dillon,
Fahy.	

The committee especially urges all the bee-keepers living in the districts of the members of the above committee, that they inform their members of the nature and danger of foul brood, and of the importance of a law to exterminate the dread disease.

The bee-keepers who are able to wield any influence at the State House, are requested to correspond with Secretary Stone, in order to join the forces for the occasion.

C. P. DADANT,
I. E. PYLES,
JAS. A. STONE,
Committee.

It seems almost unnecessary for us to urge the bee-keepers of Illinois to be prompt and active in this matter, as it is so important to every bee-keeper and to the life of bee-keeping in the whole State.

A Bee-Paper Editor's Epitaph.—Editor Hutchinson, of the Bee-Keepers' Review, says this in closing a recent editorial item:

"When I am dead and gone I wish to deserve the epitaph: 'He taught us to keep more bees.'"

It seems to us a better epitaph would be this: "He showed us how to produce more honey." One might "keep more bees" and not get more honey than from less bees. Honey is what bee-keepers want. However, every man to his own preference, whether it be "more bees" or "more honey."

Eastern Illinois Convention.—The 3d annual meeting of the Eastern Illinois Bee-Keepers' Association will be held in Chartier's Hall, opposite First National Bank Bldg., St. Anne, Ill., Wednesday and Thursday, March 1 and 2, 1911. Among the topics to be discussed are the following:

"To Secure Big Crops of Honey," by W. W. Howard; "Cause and Cure of Foul Brood," by S. K. Pyles, H. Roorda, and I. Evers; "The Value of Sweet Clover," by George W. York; "Work-

ing with Bees Without Veil or Smoke," by H. S. Duby; "Advantage of Rearing Your Own Queens," by J. H. Roberts; "Honey and Pure Food," by J. T. Willis; "Why Do I Keep Bees?" by N. A. Timmons; "What Will the Honey-Bee Teach Us?" by P. St. John.

The Question-Box will also have a place in the program. If you have anything new or interesting to bee-keepers, please bring it to the meeting. The first session will begin at 10:30 a.m., March 1. All bee-keepers who are interested are invited to come.

St. Anne, Ill. H. S. DUBY, Sec.

Ohio State Convention.—The Ohio State Bee-Keepers' Association will be held Feb. 16 and 17, 1911, at the Grand Hotel, 4th St. and Central Ave., Cincinnati, Ohio, in Halls No. 1 and No. 2. Mr. N. E. Shaw, chief inspector of bees of the State Department of Agriculture, will address the convention on "The Foul Brood Situation in Ohio." All bee-keepers should attend. Elaborate arrangements are being made to make this the largest assemblage of bee-keepers at any one place. Bee-keepers will do well to get together in clubs, and secure their railroad tickets at a discount.

J. H. MOORE, Pres., Tiffin, Ohio.

HENRY REDDERT, Sec.,
2300 Schoedinger Ave.,
Cincinnati, Ohio.

Northern Michigan Convention.—The Northern Michigan Bee-Keepers' Association will hold its annual meeting at Traverse City, Mich., March 15 and 16, 1911. A live program is in course of preparation, and liberal premiums will be offered for the products of the hive. Northern Michigan—the home of Michigan's most extensive bee-keepers—assures a most prosperous and successful meeting. The season of the year is most favorable, and the management look forward for the best attended meeting in years. Many prominent bee-keepers from this and other States are being invited. You are specially invited. Ask the secretary, Ira D. Bartlett, East Jordan, Mich., for a program, which will give place of meeting and other information.

E. D. TOWNSEND, Pres.
Remus, Mich.

The Wisconsin State Convention.—The Wisconsin Bee-Keepers' Association will meet at Madison, Feb. 23 and 24, 1911. Cash prizes of \$5.00, \$3.00, and \$2.00 will be offered, respectively, for the best three papers written on topics of value to Wisconsin bee-keepers.

Prominent bee-keepers from abroad will also be present. All are invited. Admission free. GUS DITTMER, Sec.

Augusta, Wis.

S. Minn. and W. Wis. Convention.—The Southern Minnesota and Western Wisconsin Bee-Keepers' Association will hold its annual convention Feb. 21 and 22, 1911, in the Winona County Court House, at which time an interesting program will be carried out. Those interested are welcome.

O. S. HOLLAND, Sec.
Winona, Minn.

FAR WESTERN BEE-KEEPING

Conducted by WESLEY FOSTER, Boulder, Colo.

Companionable Bee-Folks

Mr. Eugene Secor tells us on the first page of the January issue that bee-keepers are the most companionable of folks; now I have found this true of most farmers and rural people generally, and it is especially true of bee-keepers.

The reasons for bee-men being companionable, I think, can partly be explained by the fact that bees appeal only to those who are lovers of the outdoors, flowers, and the sweet things that grow in gardens.

I suppose one reason why bee-keepers become so interested in their work is that there are so many novel and wonderful things in a hive of bees. The mighty stir that takes possession of the bees when the first pollen and honey begin to come in; the care the nurse-bees take of the brood; the swarming fever; the building of new comb and filling it with honey—all these things, in their various influences on the crop the bee-keeper will harvest, cause him to watch every detail closely, and he feels an interest in the procession of the seasons that makes him an interesting conversationalist in almost any company.

What We Know About Bees

Science has been called "classified knowledge," and this, I think, comes near enough being correct for our purposes here. So we should begin early in the year to determine what we know about bees and honey-production in our localities. If we know that our dozen or hundreds of hives are well supplied with winter stores, distributed around and above the brood-nest or "winter nest," we should be thankful. If our queens are all young and vigorous, able to pitch right in and do great things when the time comes, we should feel quite satisfied with our ability as bee-keepers. If our bees are well provided with shelter in their winter rest, either in the cellar, bunches, or on the summer stands, there is not much that can be done except watchfulness to see that everything goes right.

We know that bees eat less honey in the cellar than outside, and we know, here in the West, that in average years a colony will winter better outdoors than in a cellar. There are not always average years and I think this year is one that is not an average one, so we are wintering about 100 colonies in our cellar under the house. I wish we could get all of our bees into the cellar, but there is not room. The temperature ranges from 45 to 40 degrees, and the ventilation is good. The bees came out a little when any light could get in, but all the windows have been darkened now, and we do not look for any trouble for some time, anyway. We know that a colony of bees with 40 to 50 pounds of honey, a good queen, and a strong force of bees, can winter outdoors, but not more than one in ten of our colonies were in this condition last fall. Most of our bees that are weak and still on their summer stands, have been set together in bunches of 4—this is not any great help, but the warmth is conserved a little, as will be shown by the way the clusters move over close to the center of the bunch, as far as their hive

will permit. Then, another thing, is the greater protection from the wind which blows off the hive covers so persistently.

I do not think I have enjoyed a finer climate than that which we have here in the Arid West, but the wind does blow here very hard at times during the winter; and these winds come right after a snow in the mountains, and so are a benefit by drifting it into ravines and gulches. Two weeks ago the wind blew for several days, and when we went out to one of our out yards there were 4 hives blown all to pieces from being rolled over and over, and the frames scattered and the bees blown to the four winds. Since bunching the hives together we have not had many covers blown off.

We know that a normal colony of bees in every way needs but little frame manipulation, but the question is, Do we know how to get all our colonies into this normal condition? We are all agreed that the queen is of prime importance, so if we get a strong, healthy queen introduced where a poor one had been, a betterment is effected. Now there may be too few bees to give that queen a proper opportunity to prove what she can do, so we know that by giving that queen combs of sealed or hatching brood she will soon have assistance.

Now as to what we know about the value of stimulative feeding, there is considerable question, for we are all agreed that a colony with a good queen, and plenty of bees and honey, will come up for the honey harvest with a good gathering force.

All who have kept bees for several years in the valleys of the West will agree with me, that we have to hold our bees back in the spring, for the weather becomes so warm at times in March and April that breeding commences, only to be chilled later by a return of winter in early May. After May 10th, however, we

may encourage breeding by spreading brood judiciously.

Another thing we know here in the West—though it does not occur in every part of the West—is this: that we do not have much trouble in preventing excessive swarming. In the 13 years of bee-keeping here in Colorado, there has been but one year when the swarming fever got beyond our control. Generally, by giving plenty of ventilation and super-room, and cutting queen-cells once, the bees give up the swarming notion and go to work in earnest. What still persist in building cells are divided, making two colonies out of one that was building cells.

If the time should come when by putting a handful of bees in a hive, and in a few weeks seeing this handful grow into a fine colony, we might have a return of the wild swarming-fever some people know.

We know that what makes swarm control easy here is the slow flow, rarely going above 5 pounds, and generally running about 3, if there is any flow at all. When more alfalfa was grown, and it was not cut so early, the bees would roll in 5 pounds a day right along for week after week, but that time has passed in many parts of the West.

At the Farmer's Congress held in Fort Collins, the fact was brought out that alfalfa was not making anywhere near the growth that it used to do when the country was young. Farmers have labored under the delusion that alfalfa built up the soil in all its needed plant-food, while the fact is that nitrogen is the only thing that is fixed in the soil, and every ton of hay hauled off the field takes off of that soil, phosphorus, potash, etc.—plant-foods that have to be put back by artificial means, — spreading manure, etc. Farmers in the West have thought that their land could not be exhausted, but there is no land that will not give out if the plant-food is not put back, which has been taken off in crops. I would hazard a guess that we would have 100 percent better honey crops, and the farmers would, too, by studying and supplying a balanced ration for their alfalfa crop. Most of the Western soils have lime enough, but every farmer should know his own soil, its constituents, and the various requirements of different crops.

BEE-KEEPING FOR WOMEN

Conducted by MISS EMMA M. WILSON, Marengo, Ill.

Women in the National Association

In the list of members of the National Bee-Keepers' Association are found the names of 77 women. Of course that is by no means a fair index of the proportion of women that are interested in bee-keeping. Those 77 are merely a few of the sister bee-keepers where there is no man in the case, without reference to the thousands who give more or less aid and countenance to the lords of creation.

Uses of Vegetables, Fruits, and Honey

"The Ontario Government," says the *Canadian Bee Journal*, "has issued under the auspices of the Women's Institutes, Bulletin 184, which treats of the uses of vegetables, fruits, and honey." The part relating to honey is copied in the *Canadian Bee Journal*, and reads very much

like a reprint of the honey leaflet written by Dr. Miller, of which so many thousand copies have been circulated. Such a Bulletin ought to do good among our Northern sisters.

Bees Mixing Pollen

It is generally believed that when a bee starts out on a foraging trip, it works on only one kind of blossom during that trip. But there are exceptions. A writer, G. W. Bulman, is quoted in the *British Bee Journal*, who claims that not only are there exceptions, but bees are in the habit of changing frequently from one species of flower to another. One of the sisters, Annie D. Betts, thought this was an over-estimate, and made some investigations on her own account. During the course of the season, from March 4 to October 18, she examined no less than

American Bee Journal

1589 loads of pollen taken from bees as they entered the hives. It would not do to trust to the naked eye, for pollen of the same color may come from two different species, so each load was examined by the microscope. Think of the patience required to capture 1589 loads and examine them with the microscope! Her conclusion is that "even on the most liberal estimate, not one bee in 3 mixes her pollen at all, and not one bee in 10 mixes it to any appreciable extent (taking the years average)."

Even one in 10 is much beyond what ordinary observation would lead one to expect. It is not at all impossible that that all-prevailing factor, "locality," may have something to do in the case.

As to why bees work upon two kinds of flowers on the same trip, she says, "Are the constituents of a mixture usually derived from the flowers of similar color, or from nearly related plants, or from flowers which, though not necessarily nearly related, belong to the same flower-class?" Then after giving the result of a number of observations in this regard, she says, "Apparently, therefore, bees are not induced to change from one species to another by any kind of similarity between the flowers of the two plants. What does induce them to do so is pretty obvious; it is proximity."

It is greatly to be desired that this estimable lady would extend her observations to determine whether another factor may not greatly overshadow the one of proximity, and that factor is scarcity of pasture. One might naturally suppose that when clover, for instance, is very abundant, a bee would work on nothing else. When it leaves a flower it often darts off several feet, even if it circles about and alights on another flower not a foot from the first. If a flower of another kind be within 6 inches, would the bee be likely to alight upon it if plenty of clover blossoms are to be found within a few feet? After observing thousands upon thousands of loads of pollen upon bees entering hives during many years of observation, Dr. Miller says he has never noticed a mixture of other pollen with clover pollen (although instances may have escaped his observation), but in a time of scarcity he has seen a bee going from one kind of blossom to another.

English Ladies and Retired Army Men as Bee-Keepers

J. Herrod, as a result of his experience as a traveling expert in various counties in England during the last 10 years, says in the *British Bee Journal*:

I have no hesitation in saying that the cleanest and best-appointed apiaries I have visited were owned and managed by ladies and retired army officers.

Now which will feel most complimented, the ladies or the army men?

The Best Sugar for Man, and Its Cost

Under the above heading occurs in the *Practical Farmer* some excellent words of wisdom that the wives and mothers who look after the welfare of their families would do well to heed. They are written by T. B. Terry, a man given over to die by physicians, who went to work studying how to prolong his life to such good effect that he is to-day enjoying vigorous health, and through the press is helping thousands of others to live a healthier life. He says:

One of our folks comes to us quite a little wrought up over the statement in his magazine that sugar is cow food. Well, that is just what it is really. Our sugar is made from the coarse sugar-beets and sugar-cane,

is it not? And these are not natural foods for human beings, but are excellent for cows. Condensed sugar is one of man's devices. A too free use of it has caused an enormous amount of suffering, and has taken millions out of the world prematurely.

Sugar, as God put it in the ripe fruits, is a perfect form of food for man. And one is not likely to eat too much, as the sugar is in such a diluted condition. And it is proper food for man, woman and child, not cow food. Fruit is natural food for human beings. These are statements that are absolutely true, beyond any controversy. The matter is so simple that a child can understand it. If you want sugar in the most perfect shape for mortals, just as the Creator arranged it for us, eat the sweet fruits; they are quite reasonable in price. If they do cost a little more than cane-sugar, remember the suffering, sickness and early deaths that this form of natural sugars will help to prevent.

One can buy 12 pounds of fine seeded raisins for 98 cents; 25 pounds of the best seedless raisins for \$1.83; the best Smyrna layer figs for 70 cents for a 5-pound box; the most delicious Smyrna pulled figs for 82 cents a 5-pound box. Prunes are a little higher this year, as the crop is short. We paid \$2.08 for a 25-pound box of large, fancy ones raised in the famous Santa Clara Valley, Calif. All these fruits are heavily charged with sugar that is natural for man. Ripe bananas and most of our other fruits contain some sugar. But always remember that one should not eat sweet fruits unless they are craved, and the same of those containing acid.

HOW TO EAT CANE SUGAR IF YOU MUST.

Suppose one does not get much sugar in the best form; that is in fruits, fresh or dried, then what? Why, he may eat a little common sugar quite safely, say 2 ounces a day, more or less. And for best results it should be diluted, not eaten clear.

Dr. Wallace, an eminent English physician, tells us it is a fact that cane-sugar in a clear form is likely to be digested slowly and to give rise to serious gastric irritation. So eat very moderately of concentrated sugar, and see that what you do eat is diluted.

To illustrate: I use a little cane-sugar in my wheat drink. A teaspoonful in a cupful is thoroughly diluted. The experiments made in the German army prove conclusively that a free use of clear sugar is injurious. Of course, some can eat more sugar than others can, and serious results are not likely to come suddenly. But Nature has a way of never forgetting to punish when her laws are violated. There will be digestive disturbances after a time, and eventually sugar diabetes, perhaps, or some other serious ill. It is my opinion that trouble comes from the concentrated form of our common sugar, molasses and maple syrup, and hence our eating too much of it, and perhaps eating it clear, than it does from the eating of sugar made from cow food under proper restrictions.

There is value in such counsel; but it seems amazing that a man of Mr. Terry's intelligence, in considering the best sugar for man and its cost, should utterly ignore the fact that there is in existence something that contains sugar in the very best form for man, a "natural food," "just as the Creator arranged it for us," in the most delicious form, and at much less cost than it can be obtained in dried fruits he mentions. Surely he can not think that the sugar in raisins, figs, and prunes is in any better form for ready assimilation than the sugar in honey.

Then the matter of cost. If Mr. Terry takes the same pains to get bargains in honey that he does in dried fruits, he will be able to get delicious extracted honey at 10 cents a pound. His dried fruits cost from 7 to 16 cents a pound, and when you come to consider the sugar that is in them it is pretty safe to say that a pound of sugar in dried fruits will cost several times as much as a pound of sugar in honey.

To be sure, there are other matters in dried fruits, and to some extent this is true of honey. But in any case, whether it be that enough sugar can not be found in dried fruits, or whether the cost be too great, when he comes to consider "if you must" eat sugar, instead of practical-

ly saying, "Try not to go beyond 2 ounces a day," why does he not advise to have at least a part of that 2 ounces in honey?

Instead of using common sugar in his wheat drink, if Mr. Terry would try a mild-flavored honey, he might prolong his life just a little longer.

A National Honey-Brand

If we had a "National" brand for our honey, we as members of the National Association would have a strong shoulder to lean against, and therefore a substantial backing. A member would not dare, nor even have the inclination, in fact, to put up something not pure, and brand it with the National brand. On the other hand, no one would question the absolute purity of an article under such brand.

In the second place, more bee-keepers would rally around the National banner so as to be entitled to use the brand and its protection, thereby making the National Bee Keepers' Association that much the stronger and that much wider known, so that there would be more demand for pure honey.

Since the pure food and drug law has been in force, all bogus preparations that did not go out of business have boldly advertised their stuff under various names; and if it pays to advertise trash, why should it not pay us to advertise our pure goods with a brand that is synonymous with strict honesty? Among those benefited by this measure would be the National Association, the bee-keepers as a body and individually, the grocers and consumers, and only the glucose-manufacturers would suffer.—MRS. M. E. PRUITT, in *Gleanings in Bee Culture*.

Upon this Editor Root comments as follows:

For a number of years the General Manager of the National Association has given to members a label bearing the National seal to use on honey, so that the buyer may at least know that such honey is absolutely pure. If the word "brand" were used, or if the honey were advertised as the "National brand," would it not be a suggestion of manufactured goods? Furthermore, unless such honey were put up by a central packing force at the National Association headquarters, say, it would vary considerably in flavor. One "brand" of honey should be the same the country over.

While there may be objections to the plan proposed by Mrs. Pruitt, yet it is not the easiest thing to see just how the best success can be had without something of the kind. It is greatly to be desired that the ball set rolling by Editor York, in his annual address at the National convention at Albany, shall not stop rolling until something really practical comes to pass. It is all well enough to talk about raising a big sum of money for a campaign of publicity, but that has been tried in the past to a sufficient extent to show that there is enough selfishness left in the heart of the average bee-keeper to prevent him from putting money into something that will bring just as much benefit to all his bee-keeping neighbors as it will to himself. Offer some plan by which he will see that those who put up the money are going to get the chief benefit from it, and there ought not to be such a very great deal of trouble to find enough to enter the scheme.

Only a Fourth of a Crop

DEAR MISS WILSON:—We had only one-fourth of a honey crop the past year. I fed the bees in spring and all fall, and got them in good condition for winter. I am hoping for a better season in 1911.

CATHARINE WAINWRIGHT.
Tilton, Iowa, Dec. 30.

CANADIAN BEEDOM~



Conducted by J. L. BYER, Mt. Joy, Ontario.

Distinguishing Names for Foul Brood

MR. J. L. BYER:—I have just been reading your report of the Ontario convention in the American Bee Journal, and feel like bringing up again the matter of names of bee-diseases.

I do not know exactly what motive some may have had in fighting the accepted names for the two contagious diseases which we have in Ontario, and I do not believe it has ever occurred to you that unless we call a disease "Foul Brood," we have no legislation against it. Our law refers to "Foul Brood." "Black Brood" does not come under that head, so whoever insists on continuing to use the name "Black Brood" will only make trouble for us in handling the disease situation in Ontario. I know you at least have no desire to do that. Don't you think it would be better if we dropped out that word "Black Brood" entirely? There is no use trying to give the disease a descriptive name, because if we attempted that in this case, there are a number of other things we might call it which would not look well in print. The term "European Foul Brood" is pretty generally accepted, especially by the scientists from whom we have the best definite work. It brings the disease under our present legislation, and does not need to confuse any one, if those who have the ear of the public, as men like you have, will carefully stick to the accepted terms.

If I am wide of the mark in this I hope you will correct me for the good of the industry.

Yours very truly,

MORLEY PETTIT.

After having so positively stated not so long ago in this department, that all future references to the disease in question would be referred to as "Black Brood," in so far as I was concerned, some may wonder at my giving Mr. Pettit's letter to the public. Quite a long time ago, I was taught that a bad resolution was better broken than kept, and I confess that after reading very carefully what Mr. Pettit has to say on the question of names of brood-diseases here in Ontario, to be about convinced that the resolution I made on the matter belongs to the "bad" class this time.

Our laws in Ontario certainly refer to "the disease called Foul Brood," and clearly we have no power under our present Act to handle anything that is not known by that name. In other words suppose I was sent to an apiary and an examination should show the disease under discussion to be present. If I said the bees had "Black Brood," and the man was a crank, and acquainted with the Foul Brood Act, he might tell me that I had no power to order him to destroy or attend to the bees in some other way, whereas the name of "European Foul Brood," as adopted by the scientists, would leave no such loop-hole for evading the law.

My only object for using the term "Black Brood," was because of a desire to avoid confusion, and also for the sake of brevity. Dear me, the inspectors certainly have difficulties enough already to contend with, without having some more added to them, so I now pass my word that this scribbler shall not knowingly be a party towards stirring up more trouble.

Honey On Breakfast Foods

Some time ago, I believe it was in the November issue, the Editor said something about using honey on breakfast foods

instead of sugar. I might say that in our home honey is used regularly, and the writer must prove guilty to setting the example for the other members of the family!

But, say, honey is good with almost any kind of food, if you once form a taste for such compounds. Some weeks ago I happened to be taking dinner with a good friend of mine, Mr. Arthur Quantz, and after some rather fat pork had been served out, I was surprised to see him cover his slice with honey about a quarter of an inch thick. I laughingly asked him if he made a practise of using honey in that way, and he answered that he always uses honey on meat, especially if it is fat. He further said that it was *real* good, and insisted on me trying some, too.

Not to be "bluffed," I tried the mixture, and while I could eat it all right, I had to confess that it would take "practise" to teach me to prefer the mixture instead of taking each article of food separately. However, many use molasses with their meat, I am told, and for tastes of that nature I see no reason why honey would not do as well as, or better than, the molasses.

I might say that in the case of honey with cereals, we are very liberal with the honey, and believe it to be more healthful than sugar. Just a few mornings ago, I recall having heard "Edwin" remark to one of his sisters, that he noticed she was having a little porridge with her honey, and I am afraid the same remark could quite often be applied with justice towards the writer of these notes, as well.

Just a word here as to the relative value of comb and extracted honey for table use. As I have often intimated in the past, we have produced very little comb honey. Last season, however, we had some very nice comb honey, and enough was saved for home use whenever it would be wanted. I am rather surprised to say that in our family the comb honey is not wanted at all, and a section will stand on the table while at least 2 pounds of the extracted will be used. We happen to be using something extra in the way of extracted honey, so perhaps that will explain the difference in choice. However, I can not help wondering whether many families who never try extracted honey, might, after all, be much like our family in the matter of taste, if they once get started to use real, good, well-ripened extracted honey.

Temperature for Bees in Winter

On page 20, "Subscriber," who has his bees under a barn, need not alarm himself if I understand the situation correctly. Even if there are a lot of dead bees on the floor, that is but natural in a fall like the last one, when no flight was possible for a month before the bees went in the cellar. He says the cellar is dry, and that the bees are quiet. That's good enough, so don't bother trying to put on supers of chaff, or in any other way disturb the bees, and I have an idea that they will come out all right.

As to 37 degrees being too low by 7, for good wintering, I am not so sure about that. If any one wishes, I could

take him to a cellar about 4 miles away from here, where the constant aim is to keep the thermometer at as near 35 degrees as possible.

Just a few moments ago, I called up Mr. Davison, the bee-keeper in question, over the phone, and asked him what his cellar was registering today. He replied "35," stating that in order to keep it as low as that it was necessary to have a window open all the time. Of course, towards spring it is impossible to keep the temperature that low, but during the cold weather it is always kept there. Mr. Davison is one of our most successful bee-winterers, and every spring it is my privilege to see his bees—both those wintered in the cellar and those left on the summer stands—150 colonies in all. One year with another, I doubt if bees are brought through in better condition by any other man in America, and when asked what he thinks about the orthodox figure of 45 degrees for cellar wintering, he invariably answers, "All bosh." I do not profess to know much about the question, but facts certainly have a loud voice, and in this case there is no disputing the figures. The cellar is under the living room, and from all appearances it seems to be real dry; more than that, I can give no particulars, except to say that aside from the open window there is no attempt at ventilation in any way.

Wild Mustard or Charlock

If I am not mistaken in the matter, "Illinois" refers to the wild mustard, or charlock, on page 20, where he is answered by Dr. Miller. If that is the plant he refers to, I can tell him that it is quite a heavy yielder in hot, sultry weather, and that the honey is slightly amber, with a pungent taste, especially when first gathered. With us it always goes with the clover honey and usually does little harm. Some years, though, when it yields extra well, or for some reason the clover is not yielding, it then imparts to our honey a slightly sharp flavor, said honey having a tendency to smart in the throat after eating, especially if much is partaken of. As a rule, it comes in about a week ahead of the clover, and in such cases has a very beneficent effect on the colonies.

If the mustard is late in blooming, and the alsike is full of honey, as a rule the mustard is not visited much by the bees.

Putting Bees Into the Cellar

In my last batch of notes, we said something about getting "stung" in the matter of putting bees into the cellar last fall. I had almost decided to say nothing more about the matter, when on page 22 I happened to notice what Mr. Doolittle says about taking the hives into the cellar covered with snow. That settled it, for now I would be free from all reproach on my part for, couldn't I say, "Well, Doolittle was just as bad?"

The 65 colonies to be wintered in a cellar were taken away from the home yard about the last of October and never a chance of flight had they for a long time—in fact, I begin to despair of them getting a flight at all. Now half of those colonies were nuclei formed late in August, and fed steadily till the middle of October, and I know there was a lot of young bees that had never had a flight. Well, they were left out in the hope of having a flight before going in the cellar, and by mere chance, on November 26th, the sun came out so that they had a nice flight. They were in a very sheltered position with high evergreens nearly all around them, and while they had a nice flight, yet bees in packed

American Bee Journal

cases in the other yards hardly got warmed up. The hives were well spotted up, showing that the bees had indeed needed the flight, and now if they had been put right in the cellar all would have been well.

However, the next day my time was occupied, and the *next*—it started to rain in torrents, then froze and formed sleet, and my, what a mess the hives were in, with ice all over them! I decided to wait a few days, and see if it would not show a bit, but never a thaw showed up, and after waiting until December 4th, and finding the thermometer at zero, I put the bees into the cellar. Yes, it was a *nice*

job, as all who have ever had the experience will vouch for, but under the circumstances it was the best we could do. The hives were all tilted well forward, and that night the furnace room was left open, so that the heat could go among them.

Three days afterward I was in the cellar and found the hives all nice and dry. What the outcome will be remains to be seen, but from all appearances the bees seem all right yet. If I had only been able to put the bees into the cellar the day after the flight, how nice it would have been; but, then, you see, I didn't do it, so that alters the question.

SOUTHERN BEEDOM~

Conducted by LOUIS H. SCHOLL, New Braunfels, Tex.

A Season's Work in the Apiaries

Since we have been at most of our yards the past month to give the first and preliminary examination of the colonies, we have found that our care to have all the colonies with more than a sufficient amount of stores in the fall, for the winter, has paid us well. It has paid us well in that the result is strong, healthy and vigorous colonies of bees that will soon be in the very best condition for the honey-flow at any time that it may come. It has paid us well, also, because we will not have to resort to any of the more or less messy feeding to save our colonies, the result of which in the end generally is that even with the best of care in feeding, the colonies do not come out as well as those that did not need the attention. It has paid us well, also, because we have not had to worry about the fact that the bees were short of stores, and that they might starve in case a severe spell of weather might set in before we could attend to them. It is bad policy to "rob" the stores too closely in the fall, and generally results in a lot of sleepless nights for the keeper, if not worse results than that.

Finding the bees in such shape it did not take long to equalize the stores of the few that were not in the best shape by giving to the light ones from the very heavy. Out of 22 apiaries there was only one where the stores were very short, but this was due to the fact that the help in the fall overestimated the light fall flow from which the bees were to rear their winter's stores.

OVERHAULING THE OLD SUPPLIES.

The trips to the apiaries were taken on the very nice days when it "was a pity to stay indoors," and it made us feel a good deal better when we did have to stay in when the weather was bad, knowing that the bees were now in fine shape for the rest of the early spring. During unfavorable weather the workshop had much in store for us. The old supers and all kinds of hive-parts, frames, bottoms and covers, and a hundred other things were thoroughly overhauled, and "made practically as good as new." This is another thing that pays. The work-shop and the honey-house also were given a thorough "spring cleaning." Now all these things are out of the way and in fine shape for the work to follow.

PUTTING UP THE NEW GOODS.

Our carload of new supplies has arrived also. We mentioned these in our last article and are glad, indeed, that we ordered our supplies early. Our order

side strips are $19\frac{1}{2}$ inches. These pieces are then ripped into 3 equal widths at the saw-mill, which makes them just right in width after they are sawed.

To PUT THEM TOGETHER.

By referring to the illustrations you will understand how the cover is put together by observing Fig. 1. Two of the 2-foot or 1x8x24-inch pieces are placed side by side with 2 of the 16-inch cleats at each end, as shown. These are nailed together by long, slim 10 D wire-nails, which reach through all three thicknesses of the wood, and then are clinched underneath. This makes the cover so that there is no possible chance for warping. Over the middle of the cover is nailed a strip of what is known as O G batten, which completes the cover for painting. Three good coats of paint are then applied, and this makes a cover that will outlast any other we have tried. Besides, they are cheaper in first cost. They are also heavy enough so that it is never necessary to put unsightly stones on the hives to hold them down.

The bottom-boards are made in much the same way, only that one cleat is nailed at each end with 6 D wire-nails as shown in Fig. 2. Then the strips ripped out of the battens are nailed on for the hive to rest on. This is easily made, and when well painted outlasts others that we have used. Its much more cheap construction also is an important item with us in making our bottoms and covers ourselves.

Be it remembered, however, that although we make these we do not believe

was filled immediately at the factory because they were not overrun as they will be later, and as there was not such a rush in getting out orders there was no delay in the shipment arriving here in due time. Now we are putting in all of our spare time nailing up 3000 supers and several hundred bottom-boards and covers, besides a lot of other new goods that will be needed later. It is a pleasure to have these standing in readiness, and we are not afraid of losing any possible honey-flow that might come at any unexpected time. It pays to have our tubs ready, as the saying goes.

OUR COVERS AND BOTTOMS.

We go to our lumber yard and procure as many pieces of 1x8 inches by 16 feet clear lumber as we will need for the required number of bottoms and covers to be made. For the covers we will place 5 or 6 of the boards, one on top of another, on 2 saw-horses as evenly as we can. Then we clamp them together with several screw clamps so they will not shift about. We then mark the whole lot into 2-foot lengths, square them off and saw the whole 5 or 6 boards at one time. This is a great labor-saving method that we have practiced for many years. Next we cut the bottom-boards into 21-inch lengths in the same way.

For the end cleats of both bottoms and covers we take 1x12 inches, by 16 feet soft lumber, and proceed with the manifold process of cutting the boards, 5 or 6 at a time, into 16-inch lengths, or just the width of the 10-frame hive, or whatever length is used. These short pieces are then taken to a saw-mill or a planing-mill, where they are ripped into cleats $1\frac{1}{2}$ inches wide. At the same time we take enough plain battens, which are $3\frac{1}{2}$ $2\frac{1}{2}$ inches by 16 feet, out of which we get the cleats for the bottom-boards upon which the hives rest. For the back cleats these are cut in the same wholesale fashion, by clamping a bundle of 5 or more together, into 16-inch lengths. The

in going farther than that, and therefore we order all our other hive-parts, bodies, supers and frames, from the very best factories. This insures us accurately made hives, which is of the utmost importance. These can not be made by hand, nor with inadequate machinery.

THE WORK ON NICE, SUNNY DAYS.

Whenever we have some of those beautiful days when we would like to enjoy a long drive into the country, we go to some of our apiaries that need certain attention. Thus we are enabled to keep up with our bees while we are preparing everything in the shop, and enjoying ourselves all the while at no extra expense. Nor do we lose any time by this arrangement, for we can go out and have a picnic while we are going to attend to some of the apiaries miles away from home. And it is this that makes bee-keeping both profitable and pleasant. Bee-keeping for pleasure as well as for profit sounds good, and if one can make it so, why should he not?

Bulk Comb Honey and Granulation

Several times I have been asked the question as to what course was taken to prevent the granulation of bulk comb

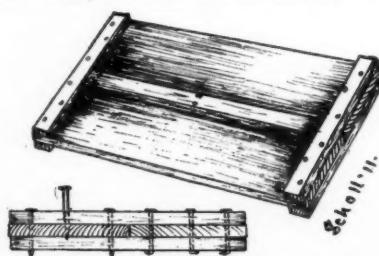


FIG. 1.—THE SCHOLL HIVE-COVER.

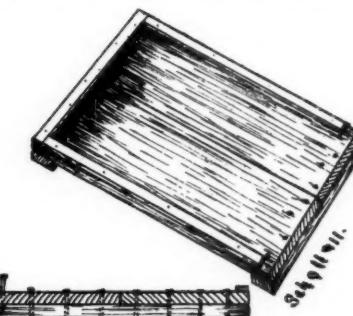


FIG. 2.—THE SCHOLL HIVE-BOTTOM.

American Bee Journal

honey which it must surely do since extracted honey granulates so rapidly. And since this is a question of vast importance, especially in the more Northern latitudes, or in some portions where honey granulates much faster than in others, I have decided to write on this subject in this issue.

When the producer of bulk comb honey ships his honey he virtually gives with it a guarantee that the honey will not granulate or candy within 30 days. This guarantee is not necessarily written, but implied, for the reason that this has become a custom that is expected to be understood by all producers as well as honey-buyers alike. When the buyer orders honey he expects that the producer will adhere to this understanding—that the honey will not candy or granulate, or "turn to sugar," as it is most commonly expressed, and this is so well understood here in Texas that it is a rule that is strictly adhered to by every reliable producer. And to be on the safe side he *must* do so, for if his honey reaches its destination in the granulated condition, it may be refused by the consignee. Or, if it granulates so soon after receipt that he is not able to dispose of it before it granulates, there may be complaint, and the customer is lost.

Some honey granulates much more readily than others, and unless the producer is very sure that the honey he is shipping out will not granulate within the specified time, he would resort to heating the extracted honey before sending it out and taking chances. This is not always necessary, since there are times when we are not required to heat any of our honey, but it is shipped the entire season without granulating for several months after it is packed. Then there are certain kinds of honey that never need heating to prevent the granulating of it for the season in which it is sold. In other cases, again, honey that does not generally granulate very readily does do so during certain seasons when the conditions are favorable for it. This must then be watched for to prevent trouble, but since this is seldom, it can be easily overcome.

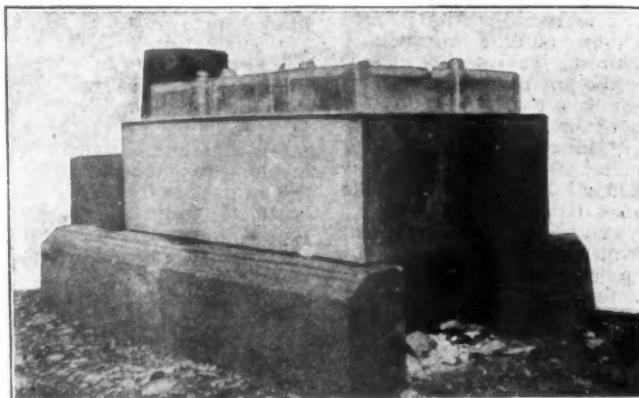
But there are kinds of honey in some localities that granulate very readily as soon as extracted, although the honey remains liquid in the comb. In this case all the extracted honey must first be heated. For this work we have a specially arranged furnace and heating vat, by which a good deal of honey can be heated during a short time. This is shown in the picture herewith. The furnace is easily constructed out of 6 concrete blocks which are nothing but regular building blocks laid on the level ground as seen. On the rear end is placed a very large block through which there is a large elongated hole, as is found in such large concrete building blocks. Over the hole is set a 5-gallon lard-can or a 60-pound honey-can will also do, with the bottom of the can removed, of course. This is for the chimney. The whole is very easily and cheaply constructed, and serves our purpose admirably.

The large vat shown is large enough to hold 6 sixty-pound cans of honey at a time. These rest on a frame-work of wood cleated together so the cans do not touch the bottom of the vat. When the cans set in the vat, and it is filled with water, it does not take long to heat the honey to approximately 152 degrees, Fahr., which I believe to be the best temperature to which to heat the average honey. Although some honey can stand more than that, it affects the taste of some of the milder-flavored honeys. Care should therefore be taken not to heat the honey too much and spoil both its color and flavor.

This extracted honey is then poured over the comb honey which is already packed in the proper cans, while it is still very warm, and thus the whole will keep liquid a long time. It is understood that the honey in the comb does not granulate for a long time, and therefore it is only necessary to heat the extracted honey that is poured over it. In this way I have very little trouble about granulated bulk comb honey, and I am sure that the same principle applied in the more North-

But this fact does not prevent the production of bulk honey since the heating method is used in such cases.

By a little careful watchfulness of this matter of the granulation of the honey that goes into the production of bulk comb honey, knowing when to heat your honey so that it reaches the market in good shape and remains so long enough until it is used up, there will be no trouble. We have just as much to fear from this question in some parts of the ex-



SCHOLL'S HONEY-MELTING STOVE AND VAT.

ern latitudes would make bulk comb honey production quite as profitable as it is here.

In this connection it might be well to say that some of our Southwest Texas honey granulates as soon as it is thrown out of the combs a few days. Sometimes it does this so rapidly that when the extracting crew leave their work on Saturday, and resume it on the following Monday, they find the honey in the extractor and other vessels granulating very much.

treme South as those located farther North, as honey granulates rapidly, but by using the necessary precautions at the right times, we are not troubled about the matter. That is one reason why I have not hesitated about advocating the production of bulk comb honey for the North. However, it should be understood that it would be unwise to put up very large quantities of it at one time before there is a sale for it—a thing that we do not practice here.

CONTRIBUTED ARTICLES~

Facts and Suggestions for Honey-Shippers

BY HILDRETH & SEGELKEN.

DECREASING DEMAND FOR BUCKWHEAT AND MIXED COMB HONEY.

For the past few years we have experienced a decided falling off in the demand for the above grades of comb honey; last year, in particular, and this season still more so. We are unable to account for this, unless it is that the prices have been too high for the average purchaser—merchant as well as consumer—as we do not believe that the production has increased to any extent from former years.

For the sale of buckwheat comb honey we have to depend upon certain territories. Many markets do not want it.

We were compelled, this season, to turn down some of our old shippers who expected that we would buy their

crop, as we did in former years, and they were very much surprised when we would not even encourage shipment of their honey on consignment, as we were heavily stocked and would not have been able to render them account of sales in reasonable time, and certainly not at prices they might have anticipated.

All that is left for us to do is to dispose of this honey at best prices obtainable instead of carrying it indefinitely, or holding it over for next season, which we consider poor policy, as buckwheat honey is apt to granulate, and in this case would not be worth more than the extracted.

We have certainly no desire to try to discourage the producers, but we must reckon with facts as they exist, and our advice to New York and Pennsylvania bee-keepers is, to produce extracted buckwheat instead of comb. The extracted will always find a market at at least fair value; and, moreover, and most important of all, can be carried over until another season without depreciation in value.



American Bee Journal

No. 1 WHITE COMB HONEY (SO-CALLED.)

We say "so-called," as altogether too much honey is marketed under this grade that never should be sent to a large city market, or, in fact, to any market. It seems to be the general idea, even with some of our prominent bee-keepers, that any old thing will go as No. 2. In numerous instances bee-keepers will glass these sections, which are from half to two-thirds filled. This makes it all the harder to dispose of such honey. If these sections were not glassed, they would be more readily sold than with the glass on both sides, as customers do not care to buy a lot of empty cells, glass and wood. Sections not more than half filled, in some cases the one side of the comb nothing but empty cells; fancy white in color, amber, mixed, all kinds in one case. There is no satisfaction in handling such honey, and we can not see where the satisfaction comes in, to the shipper, when he gets final returns.

Do not send such honey to market; sell it at home, if possible, or extract it.

COMB HONEY IN CARRIERS.

This is the *only way* to ship comb honey, and we most emphatically advise the use of them unless in large quantities, where the producer can load the honey himself in a through car to destination.

Where comb honey is shipped in smaller lots, say from 25 up to 200 or 300 cases, it should always be packed in carriers; it is immaterial whether the distance it has to go is short or long, whether in a through car or otherwise. In almost every lot where honey is shipped in the original small cases, we find some of it broken down. Honey packed in carriers, with hay or straw on the bottom, with handles extending from both ends, invariably arrives in good condition.

We prefer to receive all honey in carriers, whether unglassed sections, glassed, or in cartons. The extra cost of the carrier should not be considered, and will be more than offset by not running any risk of breakage.

Shipping-cases holding 24 or 25 combs, should be packed 8 cases to a carrier, and those holding 20 combs, 9 or 10 cases to a carrier. The net weight and grade should be marked plainly on top of carrier, so that the honey may be reshipped without opening or disturbing the carrier.

LATE SHIPPING—SAME OLD STORY

Comb honey *can not* be sent to market too early. Too many producers seem to neglect this very important fact.

We had numerous orders cancelled the past season because the honey which we had bought did not arrive in time, and we could not make delivery. In the future, where we buy a crop of comb honey, we shall insist upon delivery at a fixed date. This late shipping could be avoided, if bee-keepers would order their supplies in time. Late shippers must take the consequences of slow sales and declining market. In all our experience we have never known of a single instance where a bee-keeper made any gain by holding back his comb honey.

New York, N. Y.

Moving Bees a Short Distance

BY C. P. DADANT.

"I have to move some colonies of bees a short distance. I am at liberty to select the most suitable time for this. At what time of the year would I best do it?"—ILLINOIS.

Moving bees may be done at any time of the year if the proper requirements are complied with. When the young bee takes its first flight it circles about the hive carefully, turning its head towards it, so as to take note of the exact spot. The action of the young bees when first emerging from the hive resembles that of robber-bees that wish to make note of the spot, so as to come back for more spoils. The only difference is that the young bee is much more composed in its flight. But the purpose is the same. They wish to be able to come back to this identical spot. The exact location seems so well printed in their memory, that if you move the hive but a foot or so they will be likely to alight nearer to the edge than the center of the entrance, in the direction from which the hive has been moved. However, if the ground is absolutely clean around the hive, the distinguishing signs being absent, there will be less hesitancy in alighting in front of it, even if it has been moved several feet. That bees do make mistakes is clearly seen when colonies of different colored bees are in close proximity to each other. These mistakes are usually made only after the first two or three flights, and not later in life. Yet even old field-bees may be made to enter the wrong hive by covering their own home with some obstruction.

Knowing all these things, we must compel our bees to take notice of a change of location, when they leave the hive for the first time after a change has been made. This may be done in a variety of ways, but the cheapest and most practical is to place a shade-board in front of the entrance in such a way that the worker-bee is compelled to go around it in taking flight, instead of starting out in a "bee-line," as she usually does. If the worker starts out and does not notice the change of location until it is 10 or 12 feet from the entrance, there will be danger of its being unable to find the hive again, especially if there are other hives in close proximity.

A very good method, in spring and fall, to call our bees' attention to a change of location, is to confine them to the hive by closing the entrance during the night, and waiting to release them until some time after daylight, when they have become impatient at their confinement. If a little smoke is used to release them, when they tumultuously rush out, there will be no danger of stings, yet the unusual condition of this temporary confinement will be sufficient to cause them to look about them, and there will be no loss. Should a large number of bees get lost from the new location, through some mismanagement or accident, and return to the old spot, a very simple method of saving them is to give them a comb of brood in an empty hive at the old spot. When evening comes the lost bees thus gathered should be carried back to the

new location. They are then so glad to find their old home and their mother that not one of them is caught again at the old place. They act exactly as do bees that have swarmed—they reconnoiter before they leave on their next field excursion.

I said at the beginning of this article that bees might be moved at any time, but there are times when I would prefer to do it—spring and early fall. In spring many young bees are hatching daily, and these all have to learn the location. The old bees are getting less numerous every day, and a less number will get lost, of course, than at any other date. It must not be done too early in the spring, because if a great many of the active workers were to be lost, it might endanger the life of the colony. I would not transport the hives in summer to new locations, unless compelled to do so by necessity, because the hives are very heavy, the bees can not be confined safely for any length of time, owing to the heat, and the working field-bees are more numerous at that time than any other.

I would not move bees in late fall or winter, if I can help it, because there are often times when the weather is just mild enough for the bees to fly, but not enough to allow them to take a long flight without being chilled. When the hive has been moved there is more hesitancy in the flight of the bees, more time is required to take note of the surroundings, and there is more chance of the insect being chilled and lost.

These are general rules, not to be taken too literally, for exceptions will often occur. For instance, if you happen to move your bees on a cold winter day, and take every precaution that they may notice the change of location, you may have a bright, warm day for their first flight. In that case you will achieve success. We can only speak of general circumstances and possibilities.

Moving a colony of bees only a few feet on short notice, when they are able to fly, I would close the hive the previous evening, wait until the day is sufficiently warm, give them a smoking and general shake-up so as to make them fully aware of trouble brewing, then release them, placing an obstruction in front of the entrance for the entire day. This will usually succeed in saving all the bees, and if a few go back the suggestion I have given above for gathering them and returning them to the brood-chamber in the evening will make everything safe.

It is usual to say that the bees that have been confined to the cellar for the winter do not remember their location of the previous fall. I think this is probably the rule. But I know positively of one instance when they did remember it, and a number of bees returned to the old location. This was perhaps an exceptional instance. It is usually safe to make the change at that time.

When moving bees long distances, when they have to be confined for the space of a day or more, there is no danger worth mentioning of their getting lost, for they have been fully aware of a change of conditions.

Hamilton, Ill.



American Bee Journal

No. 5.—Points on Selling Honey

BY WESLEY FOSTER.

So many ways of making a success of selling one's honey crop have come under my observation that I am almost persuaded that any method will bring success if the man who produces and sells the honey is of the right sort. And of course the honey will be right if the producer is up-to-date in his methods.

But there is one method that seems to meet with more failure than any other, and that is selling through commission men. Probably not over one commission house out of ten handle honey in an intelligent manner, and they are never able to sell it for as high a figure for this reason. After they have had the honey for a while they sell it for 10 to 20 percent under the market in order to get rid of it. I am speaking now of the commission men who are honest in their transactions, but who have so many different things to handle and focus their attention on these that the honey does not get the attention it would have from a house that made honey its specialty.

I know an old man in Denver who makes his living selling honey in pails to the men in the office-buildings—he is not a bee-keeper, either. Then here in Boulder, a fruit-man and gardener who has nothing much to do in the winter months but sell his butter and eggs, sells honey for me. He canvasses every house in Boulder, and gets around about every 6 weeks. It is work that he can do when the weather is good, and he can stay in when it is not fit. He does not make more than \$2.00 a day on the average when working, but he has his horse to feed anyway, and he can sell his butter and eggs at the best of prices, for he can have the pick of his honey-customers to whom to sell the butter and eggs, and so he gets a somewhat higher price than the market. By calling from house to house, you see that he is cultivating every possible honey-customer, and it has a mighty effect on the amount of honey sold in Boulder, I can assure you.

This same man canvassed the town last winter, and when he started in last fall many a lady would remark with pleasure that her "honey-man" had come around again. Grocers might think that this would limit their sales, but I think it has stimulated them, for I have been selling honey wholesale to the grocers also, and I know that the grocers have no cause for complaint as to the amount of honey they are selling.

Here is some of my experience on a two-days' trip I made recently:

A BEE-KEEPERS' SELLING TRIP.

The price that the bee-keeper gets for his honey from the commission house is from 10 to 20 percent less than the price the retail grocer pays the commission house.

"Commission House" is now almost a misnomer, as few consignments are received or desired by the commission men. They tell me that more can be made by paying cash for produce, and the producer is better satisfied. In other words, the producer is getting less for his product, but he has the

money in hand, and is saved the anxiety of waiting and not knowing what he will receive for the consignment.

With the knowledge that the price the grocer pays is 10 to 20 percent higher than what the commission house would pay me, and the belief that I would sell honey to the grocers in near-by towns as well as, if not better than the commission-house road-salesmen, I decided to make a trial trip. The towns selected range from 3000 to 10,000 in population, and I visited 4, covering a distance of 70 miles from home. These towns are all in bee-territory, but the crop this year was an entire failure, so that there was a good demand for honey, the market having been developed in previous years.

The first town with 3000 to 4000 people has 8 stores; these I called on. The first store was one of the largest, and I sold 4 cases of light-weight No. 2 honey at \$3.00 per case of 24 sections, and 4 cases of No. 1 comb honey at \$3.75 per case.

The next store had already bought a good supply which had been shipped in from a distance.

My next sale was to a large grocery which had some comb and extracted honey, but they took 4 cases—2 of No. 2, and 2 of No. 1 comb honey.

Next I sold one case of No. 1 and 2 dozen pints of extracted at \$2.70 per dozen.

My last sale was for one case of No. 1 comb, and 24 half-pints at \$3.30 per case, or \$1.65 per dozen.

I had counted on making a sale to the largest store which I called on last, but they had bought heavily at a distance, and I missed a sale. So my sales were 4 in number out of 8, and amounted to \$60.45, or \$11.50 more than I would have received had I sold to commission houses. I yet had half a day, so I took the train for the next town of about 3000 inhabitants. Here I made 3 sales—2 of \$12 each, and one of \$14.40, making my day's work foot up \$98.85, or \$18.94 above what I could have possibly received from a jobber or commission man.

I reached 2 towns the next day, and made 2 sales in one and 4 in the other; these orders amounted to \$74, and figured up \$11.10 above what I could have received from a jobber. So my 2 days' work brought me \$172.85 in orders, and \$30.04 above commission-house possibilities. My expenses were \$5.10 for car-fare and hotel bill. I was gone from home one night, and had a pleasant trip; made the acquaintance of about 30 grocers, and made 14 sales, with good possibilities of more. I gave 30 days' time, though some remitted before the month was up, and I have collected every bill. I looked up the credit of each one before shipping the honey, so that I was safe. The credit ratings can not always be relied on, and one should size up the stock and the man, and also go to one of the banks and inquire. I have received valuable "tips" on a man's standing in this way, though several times I found out that the bank had an account against the party, and gave a good report in hopes that they could get their money.

The two important matters to be considered in this private salesmanship

are, therefore, due care and deliberation over credit ratings; and watchful guard over the shipments. All comb honey shipments should be packed in straw and carrier crates.

One month after making this trip I went over the same ground, and found about half of those that I had sold to were already sold out, and I got orders from these, together with several from those who had quite a stock on hand the month before. My last trip was not quite so successful as the first, but I secured \$135 in orders, and when I figured out the prices the Denver commission houses would pay, I found that I was ahead a little over \$23. My expenses were just about the same as the first trip around—close to \$5.00. So that I was \$18 better off than if the honey had gone through the regular channels.

I can not help thinking that it would pay many a bee-keeper to look into the honey consuming possibilities of his immediate territory. If things go well close to home, may be you could go farther away, and make the difference between what the consumer pays and you receive, materially less.

We individual bee-keepers can keep working away at getting a fairer share of the consumer's dollar through some of the methods that I have mentioned, and when the time comes that the National Association gets organized for handling our honey on as economical and efficient a basis as some more local associations do, there will be some well-cultivated territory that will help the National to make a success of marketing right from the start.

Boulder, Colo.

Will Bees Cure Foul Brood Themselves?

BY HENRY STEWART.

I would like to review Mr. C. P. Dadant's article on page 379 (1910). I take his criticism and note of warning to bee-keepers perfectly good-natured, and believe him sincere, but just a little over-conservative.

In writing these articles, I did not base my authority upon what some good authors have said, or upon one success, or one failure, but I had this system in operation on quite a large scale for 5 years before I gave it to the public, and was absolutely positive of my position.

Mr. Dadant produces a lot of evidence to show that I am incorrect upon the basal principle of my treatment, that bees can and do clean out American foul brood. He starts in with the broad assertion of Dr. E. F. Phillips, that the bees have no power of removing theropy matter or the tightly-glued down scales, without tearing down the wax-walls. He drops a notch with Mr. N. E. France, who, by the use of formaldehyde, succeeded in having foul-broody combs containing no honey or pollen cleaned up by the bees, and in having healthy brood reared in them. He cuts another slice off his argument by quoting Bertrand, who (because he is a careful bee-keeper and uses a disinfectant) destroys but few combs (and



I take it, regardless of whether they contain honey or not.

There is only the short step of leaving off the disinfectant and our results are identical, as my bees remove the ropy matter as well as the scales, and seldom if ever tear the cell-walls down to accomplish it.

Mr. Dadant says it is not to be doubted that bees do clean out some foul brood. If they can, and do, clean out some, it should not be a great stretch of the imagination to believe that they can, and will, clean out all foul brood if the proper conditions are met with.

He quotes Fred A. Parker as authority for one case where the disease disappeared of its own accord. This is a very frequent occurrence. During the fall flow of August and September I inspect all my bees, and mark each colony where foul brood exists, and unless the conditions are favorable for immediate treatment, these cases go over until all brood-rearing ceases, about Nov. 1, when the marked colonies are shaken on to clean combs of honey; and it frequently occurs that in several of these marked colonies no trace of the disease can be found.

For years we have heard of those who by the use of formaldehyde and other disinfectants have succeeded in getting foul-broody combs cleaned up, while other good authorities claim that no disinfectant practical to use can be relied upon to kill the germs of foul brood. Who knows but what the disinfectant has been merely a stepping stone to give the bees a chance, and those who met the natural requirements succeeded, and those who did not failed? This looks like a very natural solution, which I believe to be true.

I believe Mr. Dadant's position is faulty, and is condemned by his own arguments.

Good judgment is a very large feature with any method, but in this it is not the expert, but the bees, that do the work. There is a very large percentage of bee-keepers who are not a success with curing the disease by any method, but any one who can acquire success with the McEvoy treatment should succeed with mine.

Now, to illustrate my confidence in the permanent cure, and my lack of dread of the disease, I will state that at the last extracting last fall, the extracting combs of 3 yards (something like 3000 in number, several hundred of which have at some time in the last 5 years contained foul brood) were placed out-of-doors, and the bees held high carnival in cleaning them up.

Now I am perfectly willing that bee-keepers shall take Mr. Dadant's advice, and go slow, but before consigning my method to the junk-pile, just do a little experimenting on your own account, and see if there isn't something in it for you, and I am sure that the wheels of progress will neither be stopped nor checked thereby, but ere long will assume a whirr of success not to be attained by the method of destruction so gallantly defended by Mr. Dadant.

Prophetstown, Ill.

T. S. Hall, a well-known queen-breeders, has moved from Jasper, Ga., to Talking Rock, Ga.

Feeding Bees in the Spring

BY LOUIS MACEY.

With all that has been said against spring feeding of bees, I have had some experience that clearly points out some facts on the other side of the question, and facts are stubborn things to deal with. I think there are some who, on the strength of the way they can fall feed in *their locality*, enough to last till the abundant fruit-bloom, they have come on to stimulate brood-rearing. I say I think some of these men make a mistake in trying to lay it down as a general rule that spring feeding should be avoided.

Now, in *my location*, we have a honey (sweet clover) that is very bad to granulate, and one of the first things you will see the bees doing in the spring is just to roll out lots and lots of this hard, granulated honey. I have always read that if they have access to plenty of water they will dissolve and use this, but the fact in my case is, that my bees are abundantly supplied with water, and yet they carry out the solid granules right along.

Some one will say: "Extract your sweet clover honey and feed sugar syrup." I am not sure that would be any better; sugar inclines to granulate, too, and the honey is not all. Our winters here are generally very dry, and the changes of temperature are rapid, frequent, and often very considerable. The bright sunny days often run the mercury up to 80 or 90 degrees about 2 p.m., yet it always freezes every night, so this dryness of the atmosphere and great change from day to night temperature is enough to granulate *any* honey; and not only does it granulate, but granulates *hard*.

And now as to the danger of robbing: I know a *careless* person spilling syrup around can soon start an awful uproar in the spring, but let it come a heavy dew or light sprinkle of rain on this granulated honey the bees have scattered, and there is sometimes an even "wusser" one. The worst case of robbing I ever had was started in just this way; so if the wind doesn't blow it off the alighting-board, I brush it off myself.

Of course, the honey does not *all* granulate, and the bees can live off the liquid part, but by May what is left of it seems to be rather poor stuff to "stimulate" on.

I notice a good many now are proclaiming that sugar syrup (being destitute of pollen-grains) is poor stuff for brood-rearing, and I rather believe that myself, but is it any better from having been in the hive all winter? And as sugar is surely safe to winter on, does it not follow that when we so use it we must spring feed if we don't rear brood on sugar? For my part, I would rather stimulate brood-rearing with fresh syrup in the spring than to take chances on solid granulated sugar from the fall before, and so far I have fed some every spring, and have let some colonies (and the ones having the most old stores) go without feeding, and in *every* instance the spring-fed colonies boomed ahead and did the best. Did I uncapped some of the old stores in the unfed colonies? I did, and generally had to brush off a table-

spoonful of granulated honey from the alighting-board after each time I did so.

Often in the spring clean-up (which I do after Dr. Miller's plan) I find a pound or so of hard honey-granules on the bottom-board, and before I learned to look out for it, I had 2 colonies die in April, and on opening the hive I found as much as 8 or 10 pounds of very dry appearing granulated honey still in the hive. Some of the cells (a good many of them) were uncapped and partly emptied—sometimes just a start made—and I could hold up such a comb and *just shake out the sugar*. Did the bees *starve*? Does any one else have such an experience? Is it common to this Great Plain Region, where climatic conditions are similar, and sweet clover abundant? It seems to me it would be so, but I have never heard of any one saying so.

One thing, dandelion and willow generally help us out some, and as I said before, where fruit-bloom is abundant they can make it through to that on the old stores, even if they are granulated; but where there is no fruit-bloom, or the early flowers fail to yield, or freeze back as they sometimes do, there is only one thing to do (no matter how heavy the hives are), and that is to feed. As the weather gets warmer the bees are probably able to liquefy and use the granulated honey—all of it—instead of being forced to kick out all the solid parts to get a little liquid early in the season.

I may be wrong in some of my conclusions, but I think I have the main facts "on straight" for my locality.

This year my hives are full of Spanish-needle honey. As the bees have been getting frequent flights, I am not much afraid of dysentery, and I don't think it will granulate so badly. If it does, I have quite a lot saved up in a warm room to stimulate with in the spring. Cellar-wintering would probably solve the problem (or would it?), but very few bees are cellared here. The sunny warm days, giving a chance for frequent flights, are very favorable for outdoor wintering even if the bees do eat more.

I have fed under the cluster, at one side (division-board feeder), and above, and I find they will take it from a "pepper-box" over the cluster when it is so cool they wouldn't touch the division-board feeder.

I used something in this connection I have never seen described anywhere, or as used by any one else. With a division-board feeder I spread a newspaper, 4 or 5 thicknesses, over the top of the hive to hold all the heat down where it is needed in the brood-chamber, and it also holds the bees down when I go to fill the feeder. I press down on the paper with my fingers till I locate the "feel" of the feeder, then with my knife I cut an X right over it, then put on a super to hold the papers down, then stick a small funnel in the X in the paper and pour in a pint every day. No trouble at all. With the pepper-box feeder I use the paper just the same, only I cut a hole so as to come just over the cluster, and make it a trifle smaller than the feeder—4 short pieces of lath are placed next to the edges of this hole on the underside of the paper, and the paper tacked fast to

hem. The feeder being inverted over the hole in the paper, the blocks around the edges hold it up a bee-space off the top-bars so the bees can get at all the perforations instead of just those that happen to come between the top-bars. The important point, however, is that the feeder and the paper hold all the heat down where it is needed, and the bees don't have to keep the super warm. If the blocks are fitted up to one another, the bees won't gnaw the paper, and none can get up to crawl over the feeder (and zip up on to the him who feeds!); tip the pepper-box, puff down some smoke, take it off and put a full one on, are all very little trouble.

North Platte, Nebr.

Let-Alone Plan of Stimulating Bees in Spring

BY F. H. CYRENIUS.

For a great many years many bee-keepers have advised some form of spring stimulating, and I have practiced it for many years myself. Of late years, however, I have abandoned the plan, believing it does more harm than good, especially in early spring. If the bees at this time have plenty of honey they will have all the brood they can care for.

Now, to stimulate means more activity; they are induced to fly more in cold, windy weather, when they would be better off in the hive.

There is no question but there are times when it will pay to stimulate. Just before fruit-bloom would be as early as I would think advisable, and just after fruit-bloom we can not afford to allow any colonies to get low on stores, and stimulating at just this time until June 10th would result in profit.

Where a fall flow is expected, stimulating from July 10th or 15th to Aug. 1st, would be a profitable investment. As a rule, the bees that have an abundance of honey will outstrip the so-called stimulated colony every time.

It must also be remembered that the bees are at the height of breeding, they consume their stores very fast, and the first we know they are curtailing breeding because their stores are being exhausted. Keep them booming until the flow comes, then the less egg-laying the more honey.

Oswego, N. Y.

Bees Covered With Snow in Winter

BY G. M. DOOLITTLE.

"I have moved to a new location. Near the house is a low piece of ground which I am told fills with snow every winter, and stays thus till the elms and soft maple bloom. Would this not be a good place to put my bees for winter? Why would it not be as good as a cellar? A reply through the American Bee Journal would oblige."—A CORRESPONDENT.

Occasionally, down through the 40 odd years of my bee-keeping life, this subject has been brought up through the bee-papers and at conventions, not a few arguing in favor of wintering bees under the snow, and some have even advocated putting up a partial wind-break, so that the hives contain-

ing bees might be drifted under, such claiming that the more snow over the hives the better; but after my many experiences along this line, I can not help but think, for Central New York, at least, this is a mistaken idea.

My experience has been, where hives are covered with snow, the bees inhabiting them did not winter well. In fact, I am led to believe that the bees do not come out nearly so well in spring where the hives are thus covered as they do where there is no snow about any part of the hive during the whole winter. But where the snow can come up to the top of the brood-chamber, and no higher, it may possibly be a little help during a long cold spell, where the mercury stays below zero for several weeks at a time; but even then I would about as soon risk their safe wintering with no snow about them.

For the first few winters after commencing to keep bees, I wintered all I had in the cellar under the house, as the man from whom I bought my first 2 colonies wintered his bees in this way. As there was only a small cellar under the house, and this mostly occupied with vegetables and things needed by the average family, it became crowded as the bees increased, so I decided to winter on the summer stands thereafter, all that the cellar would not hold.

During the winter, when the first "overflow" were left out, I became acquainted with a man who had lately moved about 10 miles away from me, and upon going to his bee-yard I found his hives nearly covered with snow which lay up around them in little heaps, so that the hives and snow made little cone-like pyramids all through the yard. Upon asking, he told me that he swept the snow up about each hive every time there was a snow-fall, till he had them covered nearly to the top, as I saw them, but after the top was nearly reached he allowed them to remain, as he wished the cracks about the top of the hive left open so as to carry off the moisture which came from the bees up through the packing he had over them into the outside air, so the packing and the bees would be kept dry.

I asked him if this sweeping of snow about the hives was not a job to be dreaded. He said, "No, it is good exercise for a bee-keeper during winter, and much cheaper than to build a cellar purposely for the bees." I was quite taken with the idea, and as we soon had a heavy fall of snow, I went to sweeping, and in a week or so had the hives on the summer stands nearly covered from sight. Even now, by memory, I can see those pyramids of white snow all over that part of the apiary where bees were left, which made a picturesque view that was quite enchanting.

At the end of a few weeks there came a thaw, and when I went out to look at the hives I found that the warmth from the bees had so thawed the snow about the brood-chamber that a small dog could go all around between the hives and the snow. To say I was pleased would hardly express my delight, and it appeared that this was a much more preferable way to winter bees than even the cellar. But a few minutes

later I had my doubts in the matter, for upon examination I found that the bees were very uneasy, so much so that they were ready to fly out and perish on the snow as soon as one corner of the quilt under the packing was raised a little, instead of being quiet, as all bees are when wintered well, when it is not warm enough for them to fly.

After this we had very little snow the rest of the winter, and when spring had fairly opened, I had only three-fifths alive of those left out, and these colonies which were alive were very weak in bees. But I thought that, had the snow continued all winter the loss would not have occurred, and so the next winter found me anxious to try the matter again, which I did to its fullest extent, as we had snow so the hives were kept covered from the middle of December to nearly April. After the snow went off I found I had few bees left, as the most of the colonies were dead, and the few colonies that were left were very weak in bees, with the combs foul with excrement and nearly destitute of honey, so I had nearly a total loss except the hives and combs. Since then I have never again swept snow around the hives, but at different times had colonies drifted under so that the hives were out of sight for a month or two, and at all such times more or less injury to the colonies proved to be the case.

In one case (the winter of our deep snow with extreme high winds), there was snow to the depth of from 5 to 8 feet over some of the hives, so that I lost track of a few of them altogether. Of these colonies, not a single one was alive on the first day of May.

The difficulty seems to be, in this locality, that as soon as the hives are covered with snow the pure air is cut off to a certain extent, which combined with the warmth from the ground, the snow not allowing that and the warmth from the bees to escape, bring about conditions so unusual that the bees become uneasy, breaking the cluster which otherwise would remain compact, go to breeding, consume an undue amount of stores, and die of diarrhea and exhausted vitality before any of the brood, or a sufficient amount of the same, emerges from the cells to take the place of the old bees which are prematurely dying off under these conditions. In some of these hives nearly a quart of fuzzy young bees, together with the queen, were found dead in a cluster together, thus showing that they did not have the vigor to carry on things in cold weather that they do in the summer season.

For these reasons I would advise all who are not sure of their ground, to go slow about putting bees where they are liable to be covered with snow for any great length of time, until they know what the result will be in their locality. Some tell me that they succeed admirably in thus wintering, and I am bound to believe them. Therefore, to know what the results will be with any particular individual, and in any particular locality, without any great loss, I would try 2 or 3 colonies for a winter or two. If they winter well you can safely try more; otherwise you might be obliged to chronicle the loss of nearly the whole apiary.



American Bee Journal

Few or Many Colonies—A Reply to Dr. Miller

BY L. S. CRAWSHAW.

I have read your editorial in the September (1910) issue of the American Bee Journal (page 278), and I see that you have therein set me a congenial task in somewhat uncongenial phraseology. For just what sort of a fight you are spoiling, or under what rules, is not quite clear, as balancing an aggressive chip on your shoulder you throw out to me a public challenge to take you and "gibbet" you forthwith. May I point out, however, that it is not usual for the challenger to choose the weapons, and you will, I think, permit me the usual courtesies of duel, the more readily as you have seen fit so kindly to appreciate the lighter fare which I am only able to provide for my opponents and my friends.

COFFEE AND BISCUITS.

For I myself am in some sort your debtor, having partaken freely, from time to time, of the good things which you set before your guests, and I can not therefore but respect your wishes, ill-chosen though may consider the suggested weapons of your after-dinner challenge. So, willingly though I would cross swords with you in friendly bout, I have no desire to gibbet you, or to see you hanged, otherwise than upon my study wall, were the happy means at my disposal. Indeed, I find myself partially disarmed, and in curious agreement with the spirit of your criticism, although I may be able to make apparent some literal difference in our points of view, if I take your comments *seriatim*.

COLONY OR HIVE.

You first question my use of the term "hive," where the intention is clearly that of colony. I should have expected you to welcome the tamer term, but as you do not, will kindly refer to your respected Webster, where you will find full authority for this particular use. The ancient derivation of the word implies a family or colony, and you will find Shakespeare cited as using it in the sense you question. So that I am content to refer "too common error" to these gentlemen.

OUTRUNNING POWERS.

If I grant that "the beginner's enjoyment has principal reference to the future," that must be because it is such an excellent argument for the reasonable prolongation of his pleasure of anticipation! But I have no desire to detract from his present pleasure by warnings as to the future, only rather to say to him, "My young friend, make the most of the present joy, and if you must build, castles, build them either lightly in the air, or solidly upon a sound foundation of experience." Not, be it understood, "Do not build," but count the cost of building. Whether or no, I have seen so many cases where a bee-keeper has outrun his powers and become slack, even occasionally a menace to others, that I believe my warning to be, in part at least, well founded. Bad seasons have come, and the labor and expense of autumn feeding have been either begrimed or delayed with the usual results. Disease has perhaps crept in, and Disease and Inexperience are a fell pair to run in double harness, whilst Discouragement—their careless foal—listlessly ruins some fair garden. So that, for the happiness of the bee-keeper it is well that plans should not be allowed to outrun powers. For the possession of bee-fever does not necessarily imply either understanding or ability, and though these may exist, the requisite time, or even the necessary appliances, may be inadequately available. I notice that you specify sufficient leisure, but this is surely to plow crosswise with my postulatory heifer. As who should say, he has the time, ability, and inclination, so how can he outrun his powers!

AMATEUR OR PROFESSIONAL.

My warning is, however, essentially intended to apply to the beginner, fascinated by his new hobby. And I speak of hobbies as I have known them. Nothing is too good for the hobby lover, the true amateur as such, whereas it is too often the case that a hobby, turned into a business, loses some of its charm. Happy and successful is that man whose business and hobby remain one. Just where the line between amateur and professional lies in our craft, it is difficult to say, unless a very hard and fast line be drawn. I do not think it lies between "1000

and 5000 pounds." But my critic appears to lose sight of the trend of my perhaps rather loosely constructed paragraph, when he speaks of fewer colonies or more help. That is essentially an argument which must apply to the professional, and not to the amateur, whose delight in his hobby can not be obtained by proxy. And I do not address the professional, who may be supposed to have discovered for himself his powers or his limitations.

LOCALITY.

Whether a difference be admitted or not in the point of view, professional or amateur, from which we discuss this subject, something may be conceded to locality, that apparently potent source of bee-men's difference. Conditions in the Motherland may not be quite the same as in the United States. Here we have lecturers, who preach, both in and out of season, the advantages to be derived from the pursuit of bee-keeping. And one result of their (in my opinion) too often ill-judged assurance of profits to all and sundry, is the creation of a number of bee-owners who are not best fitted to pursue the craft to any length.

Again, bee-keeping as taught and practiced here, is apparently a more complicated business than your own. This may be mainly due to our much shorter and more precarious honey season. Exceptions in the form of good seed and sheep locations occur, no doubt, but the text upon which you base your critical sermon, may reach many other districts where bee-keeping on a large scale is not possible.

MY OWN EXPERIENCE.

You ask especially after this, and I may tell you that until the past $2\frac{1}{2}$ years (when I left the parental roof to set up a home of my own, and to be rewarded a few days ago by such another "Brighteyes" as "Uncle Amos" used to tell about) I lived in a district where a surplus was hardly possible at all. The only honey obtainable was that of early spring from the trees—mainly a green and unattractive honey from the sycamores—and an occasional autumn flow from the ling or common heather, only to be secured by a wagon journey over the rough roads of half a mountain or moor. To obtain the first, considerable care or skill was necessary, and the flow was by no means certain. And to obtain the second, three conditions were essential: Good weather, a plant-yield, and considerable strength of stock already provided with worked out sections. In my particular district, it was rarely, perhaps once in 7 years, that these conditions obtained coincidentally. Worked sections were difficult to obtain, as there was no clover to build up the colonies, and often when all was otherwise favorable for the later flow, the conditions of the summer had already rendered it useless. When I say that I have kept all my early enthusiasms through such conditions, you will perhaps understand that I have known and overcome at least some difficulties.

TONS OF HONEY.

Ah! dear critic, that is not "fighting fair." To set my mouth a-watering at the thought of those snowy sections, and then to call a fresh tune because I can no longer whistle my own. It is as though one showed cut lemons to a German band, and then dealt blame because the music was too liquid. But I will confess that I, too, share the pleasures of anticipation with the veriest beginner, and yet I look forward to the day when I shall work from dawn to eve in a city of myriad wings. How I should like to share with you the joy of knowing that the best had come. Some day, some day, perhaps! But, with other burdens to carry, the apicultural hill is a long one, and the climbing weeds out the unft, just as upon any other ladder of life. How few there be who have attained the top. Those who have done so may retain their old-time interest, and the key to their happiness lies, not in the business *per se*, but in its entire suitability to their particular temperament. These giants are, therefore, not entirely qualified to judge the failures to be, nor is it reasonable to expect that the pygmies shall be able to stride along in their seven-league boots.

THE ORIGINAL POSITION.

And it is to make clear to the tyro, that happiness lies within himself, and not necessarily in greatness of possessions, that I still cry my cry. I would particularly direct your notice to that word "necessarily" in my original argument, for bee-hives—I beg your pardon—colonies of bees, are very much like other possessions, and multiplicity of cattle, or dollars, or houses, or

wives, does not, I believe, "necessarily" bring increase of true happiness or peace of mind even to the wisest, or the most understanding of men. I do not speak of all these things from "my own experience," so that I am quite open to be further corrected by my good critic, should he desire to exhibit his powers! He has, however, already properly appreciated my prime intention, as he echoes the oft uttered, and wisely endorsed warning to beginners, "Not to outrun their powers." Norton, Malton, England,

Webster is not the only dictionary which supports the use of the word "hive" as representing the little folk that dwell in the hive. But the dictionaries can only make record of what is customary, and sometimes what is customary is not the very best. Although referred to Messrs. Webster and Shakespeare, any plea I can make to them will hardly avail. Language, however, is always more or less in a formative stage; and I take it that every man who uses a language has a little influence in deciding how that language shall be used, however infinitesimal that little may be. So I make my appeal to you, Brother Crawshaw, as one having more than the average influence in deciding what names things shall have in the realm of bee-keeping, to do your part toward helping to avoid the confusion that arises from having too many different things for the same name, and too many different names for the same thing.

It will, no doubt, be generally agreed that the word "hive" is entirely appropriate as the name of the structure in which a colony of bees dwells, and it will save confusion if the word is always used among bee-keepers with that one meaning, just as it will save confusion if we avoid calling a colony a stock, a stand, or a swarm. If a man writes asking what it will cost him to buy "one or two hives," I will have no difficulty in making some kind of an answer, provided the word "hive" be always and only used to mean the dwelling that a colony inhabits. But if it be used also to mean what is in the hive, then my brain is sadly puzzled to know which meaning is intended. Such puzzling of the brain is not conducive to longevity. I'd like to live as long as possible; so I appeal to you for help in that direction by using your influence in the interest of simplicity and clearness.

As for the rest, any difference of opinion between us may be due to our different standpoints. No hurry about deciding; I am quite willing to wait until you can view the matter from the standpoint of one who counts his colonies by the hundred; and if you then say that your enjoyment has decreased with the increase of numbers, I shall cheerfully agree that I was mistaken—

C. C. M.

Bee Journal "Good as Ever"

DEAR BRO. YORK:—In looking over the last number (November) of the American Bee Journal, I could not help talking to myself what an interesting and valuable number it was. When you first changed from a weekly to a monthly, I felt a bit disappointed, but of late I am reconciled and think the American Bee Journal is as good as ever.

EUGENE SECOR.

Forest City, Iowa, Dec. 6.

WANTED.—Thousands of both new and renewal subscriptions for the American Bee Journal during the present or 1911 year. Why not each present regular subscriber send in one or two new subscriptions during the next 30 days?

CONVENTION PROCEEDINGS

The Michigan State Convention

The 46th annual convention of the Michigan Bee-Keepers' Association was held in Grand Rapids, Nov. 9-10, 1910.

Were you there? Well, wasn't it one of "the conventions?" Not a dull minute during the whole session. And then look at the attendance—nearly 100 live bee-keepers present, and among them some of the "big guns," too. Missed it if you weren't there.

The first session began at 1:15 p.m., with Pres. Aspinwall in the chair. The meeting was opened with prayer, and "America" sung by all present.

A committee on resolutions was appointed, after which the Secretary gave his financial report, and also a verbal report of the work done the past year; 121 members being reported in good standing, located in 14 States.

Dr. E. F. Phillips, of Washington, D. C., gave an interesting and instructive address on the question of Foul Brood, and what Uncle Sam is doing to help bee-keepers. He reported American foul brood in 35 counties of Lower Michigan, and European foul brood in 8. The Department at Washington has nearly 4000 names of Michigan bee-keepers. These names have all been compiled during the past year. The census taken 18 years ago gave 18,000 bee-keepers in the State. Dr. Phillips estimated that there are 9000 bee-keepers in the State whose bees need inspection; and that 75 percent of all the bees in Michigan are in reach of foul brood. These figures, while startling, are important in showing the true condition of the disease. The Secretary was instructed to prosecute a campaign along the lines suggested by Dr. Phillips.

An advisory committee of three was appointed to work and advise with Hon. Geo. E. Hilton, who is to represent us before the next Legislature. This committee is J. E. Morse, E. D. Townsend, and E. M. Hunt. Prof. R. H. Pettitt, of the Michigan Agricultural College, and Hon. Geo. E. Hilton, were made ex-officio members of the committee.

Hon. Colon C. Little, State Dairy and Food Inspector, was present and added some valuable suggestions regarding the work of inspection of bees.

The election of officers resulted as follows: President, E. D. Townsend, of Remus; Vice-President, L. A. Aspinwall, of Jackson; and Secretary-Treasurer, E. B. Tyrrell, of Detroit.

The evening session began at 7:15 o'clock. H. C. Ahlers, of Wisconsin, gave a very interesting address on "A Mail Order Honey Trade." This was followed by an interesting address on "Uniform Sections and Shipping-Cases," by Hon. Geo. E. Hilton. Both addresses brought out lively discussions.

By request, George W. York gave part of his Annual Address as President of the "National," which he de-

livered at Albany. This brought out the following motion, which was adopted:

"Moved and seconded that it be the sense of this Association, and that we recommend other State Associations to become a Division or State Branch of the National Association as soon as the necessary plans be perfected."

The Thursday morning session began at 9 a.m., with the report of the judges on exhibits as follows:

Best 10 Sections of Comb Honey—1st, Oscar Smith; 2d, A. Coplin, of Illinois; 3d, W. E. Forbes.

Best 10 Jars of Extracted Honey—1st, H. A. Rushton; 2d, S. Coulthard; 3d, Frank Rasmussen.

Best 3 Sections of White Comb Honey—1st, C. S. Foote; 2d, Oscar Smith; 3d, Wesley Noggle.

Cleanest Sample of 10 Pounds of Beeswax—1st, S. Coulthard; 2d, Frank Rasmussen; 3d, H. A. Rushton.

Sweepstakes—H. A. Rushton.

Judges—E. D. Townsend, Mrs. S. Wilber Frey, and George W. York.

After this report on exhibits, the following addresses were given, each bringing out its particular discussion, and all interesting and instructive: "The Aspinwall Hive," by L. A. Aspinwall; "The Pearce Method of Bee-Keeping," by J. A. Pearce; "The Uncapping Machine," by E. D. Townsend; "Developing a Home Market," by W. S. Frazeur, Sr. Jenner E. Morse also added to the last subject.

The members were asked what smoker they use, and why, and what uncapping-knife they use, and why. The discussion this brought out would have been interesting to manufacturers. Several uncapping-knives were exhibited, some of them rather aged.

Saginaw was selected as the next place of meeting. Invitations were presented from Saginaw and Detroit.

A number of resolutions were adopted, thanking various persons and institutions for their assistance in making the convention the splendid success that it was. The members appeared to be well pleased with the interest the United States Government is taking in bee-culture, and the assistance it is giving in the fight against foul brood.

The convention adjourned at 3 p.m., Thursday, Nov. 10th.

Detroit, Mich. E. B. TYRRELL, Sec.

The Eastern New York Convention

The third annual convention of the Eastern New York Bee-Keepers' Association was held Dec. 8, 1910, at Albany. President W. D. Wright occupied the chair.

Owing to the recent National convention at Albany, the attendance was not as large as otherwise would be expected. Many who are usually present, and who attended the National convention, were absent at this time. And yet there was a larger attendance than at the last annual convention.

The Secretary's report showed an

enrollment of 95 bee-keepers as members, 34 of whom joined during the year.

The Treasurer's report showed a favorable condition of the treasury, with a handsome balance on hand.

On motion of C. B. Loomis, the Secretary was directed to address a communication to Collier's Weekly, to refute the canard concerning artificial comb honey.

W. D. Wright as president, S. Davenport as secretary, and M. A. Kingman as treasurer, were re-elected to their respective offices. Audubon Johnson was elected 1st vice-president, and C. W. Hayes 2d vice-president.

S. Davenport and W. D. Wright were elected delegates to the annual convention of the New York State Association of Bee-Keepers' Societies.

The contents of the question-box were quite limited; but there was animated discussion of the few questions presented, interspersed with wit and humor to the entertainment of the audience.

In answer to one query, the president stated that the best time to put bees into the cellar, from his experience, was from Nov. 1st to 10th.

The question was asked if a larger hive than the 8-frame Langstroth were not more desirable? This led to a lengthy consideration of the subject of the best hive for practical use, during which the Adams hive of 16 Gallup frames parallel with the entrance, was suggested and described by G. H. Adams. He had used this hive for 25 years with the best results, and but little swarming. The merits of this hive were ably advocated by H. Lansing.

It seemed to be fully conceded that a larger hive than the 8-frame Langstroth is more desirable.

It was decided that the next semi-annual convention be held in Albany in the spring.

There had been repeated disappointment in the efforts to secure addresses or papers on specific subjects for this occasion, and much anxiety was felt for the success of the convention; but it proved to be one of the most enjoyable conventions in which the association had ever assembled.

S. DAVENPORT, Sec.

South Dakota Convention

The South Dakota Bee-Keepers' Association met at Sioux Falls Jan. 27, 1911. While the meeting was not largely attended, nevertheless it was very interesting to those present.

Miss Rhoda Carey gave an excellent address on "What I Know About the Bee-Hive and Its Occupants." Mr. W. P. Southworth, of Iowa, furnished a lot of instructive hints on "Disposing of Our Honey Crop to the Best Advantage." Pres. Ginsback gave a few points on "Management of Bees to Get the Most Honey." Secretary L. A. Syverud talked on "Foul Brood." Discussions followed the different topics and were entered into with interest by all present.

The officers for the ensuing year are as follows: President, R. A. Morgan; Vice-President, C. Pabst; Secretary-Treasurer, A. L. Syverud.

It was decided to hold a field-meeting during the forepart of July.

GEO. F. WEBSTER.



American Bee Journal

DR. MILLER'S ANSWERS~

Send Questions either to the office of the American Bee Journal or direct to
DR. C. C. MILLER, MARENGO, ILL.
He does NOT answer bee-keeping questions by mail.

Feeding Bees in Winter

Last year was my first with bees. I bought 2 colonies and increased to 6, and took off 140 pounds of comb honey. I had a late swarm, and, having no regular hive, I took a store-box and nailed $\frac{3}{8}$ -inch slats, so as to have the appearance of a frame hive. Now this box has only a few handfuls of bees, a small amount of comb, and is very light. I have had no experience with feeding bees, so would you advise me to try and feed them through, and transfer them to a new hive in the spring? If so, how would you handle them during the winter? ILLINOIS.

ANSWER.—The chances for bringing that colony through the winter are not the best. Likely you will do best to save it into the cellar. It is not very likely that the bees would come down to the bottom of the hive to get any feed. If the hive is so made that you can take off the cover, leaving the slats exposed, you can lay pieces of comb honey flat on the slats. Even then the cluster of bees may not be close to the top, and the bees not reach the honey. If you find they do not, you can turn the hive upside down and lay the honey directly on or between the combs, and then there will be little doubt about their reaching the honey. It will do no harm to leave the hive upside down. Years ago, before I had any frame hives, I wintered my bees in box-hives entirely in the cellar, upside down.

Paper Packing for Winter-Cases

I wish to make some winter-cases, to consist of a box of thin lumber lined with a great many layers of building paper. What thickness of solid paper would you consider equivalent to 5 inches of chaff? The whole case is to fit snugly over the hive so as to be easily taken off or put on, and there will be cushions for the top. Would you consider such a case likely to be successful?

ONTARIO.

ANSWER.—I can do no more than to make a guess in the case, and should say that 10 inches of solid paper might be equivalent to 5 inches of chaff, as the solid paper is a better conductor of heat. But I suppose you would not really use solid paper, but many sheets packed together. That would be different, and 5 inches, or even less, might be as good as the 5 of chaff, depending upon the thickness of the paper. It ought to be successful, but perhaps no better than chaff or planer shavings.

Spacing Frames

1. Is it material that the top-bar of the Miller frame should be $1\frac{1}{2}$ inches wide, and, if so, what would be the disadvantages in a top-bar $\frac{3}{8}$ inch wide in that frame?

2. How wide were the top-bars of the unspaced frame formerly in use by you?

3. Did you find disadvantages in the unspaced frame other than those mentioned in your book?

4. What is your opinion of the use of the Miller or "metal spaced" frame, with top-bar $\frac{3}{8}$ -inch square for any location, either comb or extracted honey, the idea being that the combs could be trimmed to the proper thickness with the narrow bar, while the knife would not work against the metal or nails, and at the same time the frame might be used for producing comb honey?

VIRGINIA.

ANSWERS.—1. I'm not sure that there would be any harm in having the top-bar $\frac{3}{8}$ inch instead of $1\frac{1}{2}$ inches, except that it would make more trouble with bur-combs built between top-bars.

2. $\frac{3}{8}$ inch.

3. Yes, there was at least one other. As the frames hung entirely free, in time there was a little warping of some of the top-bars. A very slight twist of the top-bar would allow quite a bit of swing out of true at the bottom of the frame, so that it sometimes happened that at the bottom the end-bars or

bottom-bars were glued together, causing a very unpleasant annoyance.

4. It might work satisfactorily; but only after trial could one be sure about it. How much the metal spacers would be in the way of an uncapping-knife would depend upon their construction. If there is metal at each end on each side, there would be trouble. As you know, I use common nails as spacers. These are only on one end on each side of the frame, and by starting the knife at the end where the spacers are, there ought to be little danger of striking the knife on the metal. I have seen in foreign bee-papers mention of metal spacers that were removable, being taken off for extracting, and then put on again upon returning to the hive.

Dampness in Hives

I have trouble with dampness in my hives; that is, water hanging on the underside of the cover, and I was wondering if a cover like the one in "Forty Years Among the Bees," made with dead-air space, would absorb the moisture from the bees. I don't like to use burlap. I have the hive-entrance contracted, leaving it very small, as robber-bees are always ready for business. Probably the small entrance is the cause of the dampness.

CALIFORNIA.

ANSWER.—The cover with dead-air space will not act as an absorber, but it will have some effect—and probably a good deal of effect—in preventing moisture from accumulating overhead and falling in drops on the bees. For that air-space keeps the cover warmer than the sides of the hive, and so if there is any condensation it will be on the side-walls, and not overhead. It is a matter of some importance to have the top of the hive warmer than the sides, or, to put it another way, to have the sides colder than the top. Even with solid covers, you will help matters by putting something over them to make them warmer.

Self-Queening in Same Hive—Leather-Colored vs. Plain Italian

1. I am thinking of queening by allowing a queen to be reared above the excluder and then allow her to come back and enter the hive below after she is fertilized. Will she kill the old queen, or be killed? If you think this is not a good plan, what would you advise?

2. Please distinguish between leather-colored Italians and Italians. Which do you prefer?

COLORADO.

ANSWERS.—1. I have not been successful in getting queens reared above an excluder. If a cell is given above an excluder, the queen somehow disappears before she gets to laying. If you should succeed in getting a queen reared, and she should return from her wedding trip, it is uncertain which queen would be killed; probably neither if the laying queen were old enough. A surer way is to have the young queen fertilized in a nucleus and then introduced.

2. Leather-colored Italians are, as the name indicates, rather dark in color, the colored part being of the color of sole-leather as compared with other Italians of lighter color.

Super Entrances—Drone-Comb

1. I have bought some bees, and they are in what is called, I believe, the German hive. It is 3 feet long, and has 2 entrances, each about 4 inches long. Each super has these 2 entrances. Is it necessary on all the supers? The man I bought them of said he used them in summer to get air into the hives. But I think it is a lot of trouble to close them up for the winter, and keep them closed. I would be pleased to hear from some one in Arizona.

2. There are a great many drone-combs in these hives. How many drone-combs ought

there to be in a hive? Would it pay to melt up some of the poorest drone-combs and put in foundation. It is hard to find enough extra worker-combs to make a new colony.

I am a beginner in the bee-business, and am depending a whole lot upon what I get from the pages of the American Bee Journal.

ARIZONA.

ANSWERS.—1. It is not necessary to have entrances in supers. Some think it an advantage to let the bees that come from the field enter the super directly, without having to climb up through the brood-chamber, but good authorities tell us that the field-bees do not carry their loads into the super, but unload in the brood-chamber, allowing the younger bees to do the "toting" upstairs. There may, however, be one advantage in having openings in the supers, and that is that it helps to cool off the hive in hot weather, as your friend says.

2. It pays big to melt up drone-comb. It costs more to rear a combful of drones than a combful of worker-brood, and then it costs no little to feed the lazy things, after they are reared. If there is not very much drone-comb in a frame, cut out the whole thing and use the worker part for patching.

Detecting Foul Brood

How can I tell when a colony is first affected with foul brood? I have had a few bees for the past 7 years. I have only 18 colonies, but have never had a diseased one, so I don't know how to look for it. I moved here last fall, and they tell me bees around here have foul brood.

MICHIGAN.

ANSWER.—Keep watch of the brood. So long as you see no dead brood, all the larvae being pearly white, you may feel easy. The first thing you will see of European foul brood is that some of the larvae, instead of being white, will have a yellowish color. In American foul brood, as the disease advances, you will see the cappings of some of the sealed brood sunken, with a hole in the center. When you find any dead brood, send a sample to Dr. E. F. Phillips, Agricultural Department, Washington, D. C., and he will tell you without charge what the trouble is.

Grapevines for Shading Hives

1. How far from the entrances of hives would you advise one to make a trellis of grapevines? Do you think it would be good to make a trellis up against the front of the hive?

2. Do you think it is best to have one for each hive, or have one running the whole width of the yard?

CALIFORNIA.

ANSWERS.—1. Plant a vine close up to each hive at the south side without paying any attention to the entrance.

2. Less in the way to have a vine for each hive with a stake for it and cross-arms running east and west.

Prevention of Swarming

1. What are the disadvantages, or advantages, in taking away the queen from a colony strong enough to swarm, and cutting out all but one cell on the 8th day thereafter?

2. Would the fact that my colonies usually swarm two weeks before the white clover flow affect the matter? If so, in what way?

VIRGINIA.

ANSWERS.—1. There would be the advantage that if the occupant of the cell left should succeed to laying, the colony would not swarm that season. There might be no disadvantage that the cell left might contain only a dead larva. That would not often happen. A colony might be "strong enough to swarm" without being in proper condition for it, and so not in proper condition to rear a good queen. If you should remove the queen a few days after the cells were started, a swarm would be practically certain to issue before the end of the 8 days, when you would cut out cells.

2. I'm not sure that would make any difference.

Plan to Retard Swarming

1. Do you think the following plan would work? About March 1st (for that is just about swarming time), take the best Italian queen out of her hive and put her in another which has a black or hybrid queen, killing the black one first. Then when the queenless colonies have the queen-cells all



American Bee Journal

capped, take one frame out with 2 or 3 cells on it (brushing the most of the bees off) to a hive containing black bees; kill the queen and put the frame with the cells in the center of the hive; take the frame that was just removed with young bees in the cells (but be sure there is no queen-cell on it) to the queenless Italian hive. Then take the rest of the cells and do as before, except one, which you must leave in the queenless hive. This will prevent the bees from making cells on the black brood-combs, and will hinder the black colonies but a few days till the new queen commences laying.

2. Would this plan retard swarming?

3. Would it be a good plan to have another hive with a good Italian queen filled with drone-brood at the same time I removed my Italian queen?

ARKANSAS.

ANSWERS.—1. Your plan will work, with the exception given in the next answer.

2. It may hasten swarming and may even induce swarming in a colony which otherwise would have no notion of swarming. For you put in 2 or 3 cells, and that makes the colony in the condition of a colony that has swarmed and is ready to send out a second swarm, only it is stronger, and so more sure to swarm. If you give only a single cell, and the young queen gets to laying, that will not only retard swarming, but will prevent it altogether for the season.

3. Yes, only it will be enough to have the equivalent of one or two frames filled.

Wintering Bees in British Columbia

Wintering bees seems to bother here. I have my bees in chaff hives out-of-doors, but there are quite a lot of nice days which coax the bees out, but they drop on the snow never to return to the hive. I have the entrance blocked, but still some bees come out. Would it hurt to enclose them with wire-netting for a time?

BRITISH COLUMBIA.

ANSWER.—You could hardly do a worse thing than to close the entrance with wire-cloth. Finding themselves imprisoned, a great uproar would be raised by the bees, and more would die than would die outside on the snow. A board set up to shade the entrance is about as good as anything. But sometimes it is not the best thing to prevent the bees flying, especially after long confinement. The greatest trouble comes from snow that is so soft that the bees sink in it. Some sweep away the snow for some distance, or beat it down hard. The snow may also be covered with straw, hay, or something else.

Keeping the Bee-Cellar Dry

Is there any way to keep a cellar dry enough for bees when the thermometer is only 38 degrees, Fahr.? I lost all my bees the last 3 winters. I think it must be because of the dampness and the cold. What can I do to keep it warm and dry? We have had bees for the last 20 years, and have been successful until the spring of 1908, when we lost all.

MINNESOTA.

ANSWER.—Putting lime in the cellar will help to keep it dry. But at 38 degrees, the cold may be more to blame than the dampness. For years, before there was a furnace in my cellar, I kept a small stove in it, and kept a low fire in it whenever necessary to keep the temperature up to 45 degrees. It seems a little strange that after 17 years of success you should have a failure 3 years in succession. Like enough the tide will now turn, and you will again have good success. In my earlier years of bee-keeping I had experience as bad as yours, but by sticking to it I've made quite a lot of money from the bees since.

Splinting Combs—Painting Hives—Queenless Colonies in Spring

1. What is the system you advise in using "des lattes de bois," so that the bees will build the foundation nearly perfect?

2. Do you really think that a light blue paint on hives is better than white paint?

3. In taking colonies out in the spring, if I find that some are queenless, what shall I do? Having no queen on hand or to spare, is it the best way to make one colony out of two? If so, should it be done at once regardless of the weather?

CANADA.

ANSWERS.—1. If I am not astray in my poor knowledge of French, "des lattes de bois" means "wooden lath." I can hardly think you mean to use lath in getting foundation perfectly built, and the nearest I can think

of is foundation splints. When you buy foundation splints, you receive with them a printed slip that tells you how to use them, the same as the directions given in "Forty Years Among the Bees." The splints, which are about 1x16 square, and $\frac{1}{4}$ inch less in length than the inside depth of the frame, are boiled in beeswax until the air and moisture are boiled out of them, and then while warm, but not too hot, they are one after another laid upon the foundation and rather lightly pressed in with one edge of a little board kept wet. The foundation rests upon a board that fits inside the frame. Of course, the foundation is fastened in the frame at the top-bar, and it is also fastened at the bottom-bar. About $1\frac{1}{2}$ inches from each end is placed a splint, and between these 2 splints 3 others are placed at equal distances.

2. I hardly think so.

3. Either unite the queenless one with a queen-right colony, or divide the queenless one, giving parts of it to two or more colonies. There is no such haste in the matter that it need be done in bad weather.

Moving Bees—Facing Hives—Weak Colonies

1. I have 17 colonies of bees, and I would like to move them about 300 yards to a small orchard. When would you advise me to move them, and how?

2. Which direction do you think it best to have the frames of hives? I have my hives facing the south, and every warm day that comes they take a flight, and so many drop in the snow and die.

3. I have 3 weak colonies and would like to save them. How is the best way to feed them? I am not fixed to feed them as some of the larger bee-men.

IOWA.

ANSWERS.—1. You might wait until they have taken a cleansing flight in the spring, and then move them on a wagon, fastening the bees in the hives. Clean up everything on the old location, so it will look as different as possible.

2. It probably makes little difference which way they face. Perhaps more favor a southern or southeastern exposure than any other way. You can prevent the bees coming out and falling on the snow by putting a board up before the entrance.

3. No one should ever wait till winter to feed bees. Perhaps the best thing you can do now is to lay comb honey on top of the frames, covering up warm. If you can not get the comb honey, you can use cakes of sugar candy.

Names and Terms in Bee-Keeping

What does "foul-broody" mean? Does it mean anything? How can a colony be "broody"? What is the need of using such an expression? Is it not taking liberties with the English language? Why are so many of us older bee-keepers slip-shod in our use of terms relating to bees an bee-keeping? Why not say Italian rather than I-Italian? Why not be right rather than wrong when it does not cost anything? Why use freak terms, pronunciations, etc.

NEW YORK.

ANSWER.—Why are people ignorant? Why are they careless? I'm afraid, however, that not all violations of good usage on the part of bee-keepers can be attributed to ignorance or carelessness. There are bee-keepers who have all the outward appearance of respectability, and who do not seem to transgress on account of either ignorance or carelessness, who write about "shook swarms." It must be pure cussedness.

There is, however, some warrant for "foul-broody." It seems to be in accord with good custom to add the termination "y" to a disease to mean suffering from that disease. "Colicky," meaning suffering from colic, is an example. "Croupy" and "head-achy" are also good dictionary words, and there are probably others of the same kind. It is a little shorter to speak of a "foul-broody colony" than to speak of a "colony suffering from foul brood."

Danzenbaker vs. Dovetailed Hives

1. I want to adopt the 4x5x1 $\frac{1}{2}$ plain section, and I understand one can get more comb honey with the Danzenbaker than with any other hive. I now have my bees on Hoffman frames in my own make of hives. No two are alike. I want to get down to business now, and have all equipment exactly alike. My honey-flow is from white clover only, and of only a few weeks' duration. With the

Hoffman frame it seems as if they put too much honey in the brood-frames and not enough in the sections. With the Danzenbaker shallower frames, of course, more would go into the super, but with this shallow frame hive is there not danger of getting pollen into the super also?

2. If you have ever used this hive how did you like it?

3. Do the bees winter well in it?

4. Are not the frames harder to handle than the Hoffman?

5. Will the bees store enough in brood-frames to winter on without feeding? Any information you can give me on this hive will be gladly received.

6. If you think I am making a mistake by adopting this hive over the dovetailed with Hoffman frames, please say so?

MISSOURI.

ANSWERS.—1. Yes, in my own experience I found more pollen over the Danzenbaker frames, and others have made the same complaint.

2. I used only 2, but did not like them well enough to continue their use. I could not get more honey with them than with the other hives, and I don't believe you can.

3. Yes.

4. The Hoffman frames are harder to handle than the frames I use, and the Danzenbaker are still harder than the Hoffman.

5. In this respect you will find them about the same as the Hoffman.

6. Before settling down upon this hive and section I strongly advise you to make a trial of both the hive and the section on a small scale. The majority of large producers, I think, prefer the regular Langstroth size of brood-frame (17 $\frac{1}{2}$ x9 $\frac{1}{2}$) either in the form of the Hoffman or some other form, and the 4x4 $\frac{1}{2}$ section.

Frames and Hives from European Foul-Broody Colonies

1. Could a nice lot of 5-inch extracting combs that have been on European foul brood colonies, and after extracting cleaned up by the bees, be fumigated in any way so they would be safe to use again? Would it do to use them to rear brood in?

2. Would the frames from European foul brood colonies be rendered safe for further use by thoroughly boiling them?

3. Would the hives from such colonies be rendered safe for use by scorching with a painter's blow-torch?

4. How much of the hive and fixtures (nearly new) of such colonies may profitably be prepared for safe use again?

MINNESOTA.

ANSWERS.—1. It is a bit doubtful whether fumigation of any kind would be successful against spores, so as to make one feel safe in using combs that would not be safe without fumigation. But it is an open question, yet, whether such extracting combs would be unsafe without fumigation.

2. I used a large number of such frames after boiling them in lye. Possibly the boiling was not necessary for safety, but for cleanliness.

3. Yes, and a large number of men experienced with foul brood say that there is no need to disinfect the hive in any way, either for European or American.

4. I don't know. It's a problem I'm working on. There are extremes of opinion. Some say use all; some say use none. Personally, I think I would risk using everything but the brood-combs, and it is possible that it would be safe to use an infected comb if it had been away from the hive a week or more and was given to a strong colony. But remember this refers to E. F. B. for A. F. B. is another story.

Dr. F. L. Peiro, 72 E. Madison St., Chicago, Ill., will be glad to furnish advice free to readers of the American Bee Journal along the line of obscure surgical and medical aid. Any of our readers, who wish to consult a doctor who understands his business, will find it to their interest to write or see Dr. Peiro. The Editor of the American Journal has known him intimately as a neighbor, and also through personal treatment, for almost 20 years. He will "treat" you right, if you give him the opportunity.



REPORTS AND EXPERIENCES

California Prospects—Value of Bee-Papers

We had a splendid rain recently, and prospects for more. I hope we will have late spring rains to insure a honey crop. Good honey is at a premium here, and not any to be had. I can get from 8 to 10 cents per pound for white extracted honey that formerly sold for 6 to 7½ cents.

If all honey-producers would subscribe for all 3 of the United States bee-papers, all would be sure of securing better and uniform prices for their honey. It is ignorance, or lack of proper information, that causes low prices. Buyers take advantage of these conditions. It would surprise any one to know the great number of bee-men here that do not take a bee-paper.

M. H. MENDLESON.

Ventura, Calif., Jan. 11.

Oldest Bee-Keeper's Report

The past season was too dry for bees. I had 40 colonies, spring count, and they produced 1000 pounds of fine comb honey besides about 200 pounds of dark honey. I sold the clover honey for about 15 cents per pound, and will feed the dark honey.

I put the bees into the cellar Nov. 20, 1910.

I take 3 bee-papers, read them all, and do not know which is best. But I can't do without them.

JOHN CLINE.

Darlington, Wis., Jan. 27.

[Mr. Cline has the reputation of being the oldest bee-keeper in the country, having had bees the longest—86 years. He surely made a fine record for 1910, for one of his age. We hope he may continue to be the oldest bee-keeper for many years to come.—EDITOR.]

Poor Honey Crop

The honey crop around here was rather poor in 1910. I got 700 pounds from 65 colonies, spring count. It was too dry.

I put 80 colonies in the cellar, and they are wintering well.

CHARLES J. MILLER.

Long Prairie, Minn., Jan. 18.

A Discouraging Report

The year 1910 was a failure for honey; and 1909 was nearly a failure. In the fall of 1909 bees went into winter quarters with very little stores. In the spring of 1910 they were almost out of everything when fruit bloomed, but it being nice weather they gathered enough to last them until some more bloom came on, or nearly all would have died. Through the summer they got just enough to rear lots of brood, and swarm. Last fall it was so dry they did not store enough for winter, so we had to feed.

We had pretty cold weather from October to January, 1910, but no snow. It is quite warm now, and rainy.

J. K. HUNTER.

Allons, Tenn., Jan. 28.

Driest Year in 26 in California

I have lived in California 26 years, and this is the driest season I have ever seen here—less than one inch of rain up to this time. Dry, I should say so! We can have a good season yet, though, as the late rains are what make the honey, and we have nearly 4 rainy months ahead.

S. Q. CONKLE.

Garden Grove, Cal., Jan. 8.

A Report from Texas

I see on page 286 (September, 1910), Mr. Scholl's query in regard to reports from Texas, also the answer on page 360. I believe the answer is correct. As Texas has bee-keepers from all parts of the Union, it may be said that there are 3 classes of bee-keepers here. Class No. 1 wants to tell everybody what they have done and what they are going to do; Class No. 2 loves to tell of the big things that they have done, and leave the little things untold. With this class Mr. Densy is right—they have no big thing to report, and so prefer to remain

silent. The word "enterprise" may be applied to the 3d class.

I have been keeping bees for several years, but I have never been able to get the large crops of honey like those I read of. Neither can I get the fancy prices that some get. Therefore I dislike to tell of the little crops. But I will tell it just once, anyway, so here it is:

In 1907 I commenced bee-keeping here with 43 colonies. I run for extracted honey and got 52 pounds per colony, which I sold at 6 and 6½ cents a pound, in 60-pound cans. In 1908, I took 99 pounds per colony, and sold for 6 and 6½ cents. The difference of ½ cent was in the parties who bought the honey. In 1909 I took 80 pounds per colony, and for about one-tenth of this I got 8 and 10 cents a pound, in 12-pound pails. 1909 was my poorest year, on account of the long drought, getting only 50 pounds per colony, and about 10 percent of this was bulk comb, and brought 8½ to 15 cents, according to size of can. I left my apiary in good condition Aug. 1st, with 91 colonies. When I returned in October, I found 8 colonies queenless and 3 with foul brood.

It continues dry here at present, and prospects for a honey crop are not flattering, though bees are in good condition at present.

Dillie, Tex., Jan. 7. A. J. KOLB.

A Discouraging Experience

In the fall of 1908 I came from Iowa to Southwest Texas for my health, and to engage in bee-culture for a living. The 2 years I have been here have brought little more than experience. With rainless winters and very little rain in summer, the bee-keeper has done well to keep up his number of colonies. There are lessons to be learned in leaving plenty of honey for bees, seeing that they have young queens, and giving them good shade. Very little honey has been gathered in this locality for 2 years. The bees of the careful bee-keeper are in good condition, and will be able to do good work if the rains should come. While my bank account has grown less, my health has become better.

C. H. MILLER.

Crystal City, Tex., Jan. 16.

An Arkansas Amateur's Report

I am surprised to see that Arkansas is seldom represented in the columns of the American Bee Journal. Are there no bee-keepers there, or do they just forget to report? I am an amateur with only 24 colonies of bees in Hoffman hives. I winter them on the summer stands, and seldom lose more than one or 2 colonies each winter. Two years ago (1909), I ordered an Italian queen, and now I have nearly all Italians. I produced 125 pounds of honey from a swarm of bees that issued about April 15th. I put them in a super, for I was short of hives; on the 16th another swarm was put in a super and a queen-excluder put on the first one. Then on the 17th a swarm issued from a hive that had an excluder under it and went into the "super-hive." This crowded them until they had to lay out, so on the 18th I added another super. They went to work at once, but on examination I found the queen that was alone was dead. They soon filled the two upper supers with nice honey. I used only the two supers to this hive, and they contained extracting frames with very small comb foundation starters. When the top super was just about capped, I took it off and cut out the honey, placing the super back under the other one, and so on until the honey-flow was over, which lasted until about Oct. 1st.

GEO. GUNTHER.

Cushman, Ark., Jan. 4th.

A 1910 Experience in Kentucky

Four years ago, being over 75 years of age, and finding a convenient retirement for a little rest, I began with one colony of bees to gratify a cherished desire to know more of a business which though always attractive seemed very unattainable. I now have 32 colonies in 8 and 10 frame dovetailed hives, with ample winter stores, sealed honey-

board over the frames, a super on that filled with protection from cold, slightly raised over the center, hole for escape of dampness, and all well so far.

Now for the crop of 1910. The season here was bad, too much rain and cold, making nectar-flows intermittent and short. My spring count was 10 colonies, 2 of which I devoted to trying to rear queens after the Doolittle plan, but with poor success. During the whole season I failed to get a single artificial queen-cell accepted by the 2 colonies, nor did they build any from the brood given them. Indeed it was hard to find queen-cells anywhere, though I had a limited amount of swarming. Five colonies became queenless early, and owing to conditions stated, I was unable to make them productive in time to get any surplus from them. So my working force amounted to 12 colonies. From these I took 700 pounds of comb honey in 1 and 2 pound sections, which is the best yield reported in this locality. Most of it sold at 20 cents a pound, and none less than a shilling.

My plan of management was early investigation as to condition, supplied all wants, and fed some. At fruit-bloom I gave a hive on top with queen-excluder between. Brood-rearing was fairly good until clover bloom, then I shook the top hive, and I gave supers. I tiered up brood over weak colonies. These and a few natural swarms made my increase. I intended to increase by nuclei to 50 colonies, but for adverse conditions already mentioned. I had quite a lot of unfinished sections; some of these I sold, put some in glass, and some in a 50-pound order from Texas for bulk honey.

I use 2 shallow frames in supers with sections to start work, but not in all. The season closed with colonies strong in bees and brood, but short in amount of honey gathered. Conditions, I think, proved that nectar was not to be had. Prospects seem good for the next crop. Clover is abundant, and doing well.

We are having bountiful snows. I am a honey optimist for the future, and want to make one big crop. I am looking to the American Bee Journal to direct me (a novice) in the way I shall do it.

R. I. MCQUIDDY.

Lawrenceburg, Ky., Jan. 3.

Rearing Queens in Cool Weather

Four or 5 years ago I bought 2 colonies of black bees. I determined to Italianize them early in the spring, so accordingly early in April I killed one queen, allowing the other to lay until I had reared a cell for it. I grafted the only 2 cells that the black bees started, and they were away out at the end of the frames, 4 inches from the brood-nest, and both were accepted. The grafting was done April 1st, with 2-day old larvae. These were due to hatch on the 11th, so on the 10th I removed one cell to the other black colony. On the 9th quite a cold spell began and lasted 4 days; it was cold enough for ice for 2 nights, which kept the bees clustered for the days. On the 10th I moved the cell in very cold weather and placed it in the hive about the same as it was in its own hive so far as position goes. I watched for queens to hatch on the 11th, but they did not. Then on the 12th I looked, but no queens yet, so on the 13th and 14th, and still no queens, when I concluded that both queens had frozen. But I left the cells, and about 3 o'clock on the 15th I decided to see about getting the bees to try the job over again, but, to my astonishment, I saw both queens hatching.

I put on the covers and went off to meditate. I figured that as the queens were 4 days late in hatching, or 20 days from egg to queen, that the cold spell was of 4 days' duration; and that the cells were 4 inches from the brood-nest, the queens doubtless hibernated for 4 days. This proves to an absolute certainty that queens will not freeze to kill, hovered or not hovered. The queens were first-class. Since that day to this I take no care of the queens as to their warmth after they are within 2 days of the hatching point.

T. P. ROBINSON.

Bartlett, Tex.

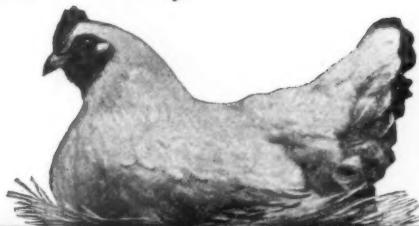
Bee-Literature and Patent Hives

I noticed in the January number of the American Bee Journal a testimonial from a lady in Washington, saying that she had saved \$25 in one season through its instruction. If all small owners of bees could be brought to appreciate this, what a difference there would be in the amount of honey produced, and, of course, in the subscription lists of the bee-papers.

There are a great many bee-men in South-

“Keep chickens,”

says the FARM JOURNAL,
and live better
at less cost.



THOUSANDS of families, in city and country, have found this the easy way to IMPROVE their standard of living, and at the same time LOWER THE COST. With chickens you always have delicious food, for the family or for "company." Their eggs supply you with ready money or ready food. They are pets that *pay their board*. By keeping chickens, boys and girls can earn money, and also get an excellent training. Sometimes the back-yard plant grows into a large business, like those of CURTISS, and FOSTER, who make many thousands of dollars a year.

Raising chickens pays if you know how, whether you keep a dozen hens, or run a large poultry-farm; but you **need the best guides**. Many get from their chickens less than HALF as much as they might get with the guidance of any of these **three splendid modern poultry-books**, which tell the experience and methods of the most successful modern poultry-raisers.

These methods have all been *tested* by actual experience and proved successful. The FARM JOURNAL stands back of them, for it has investigated them and KNOWS. They can be used with six hens or six thousand. Many are using these methods with splendid success and profit.

The Million Egg Farm is the great guide-book for back-yard chicken-raisers. It tells how J. M. Foster is running an egg farm in the heart of the New Jersey pine belt that brought his concern a profit of a little **more than \$19,000 last year**. This was made from sales of commercial eggs, some stock, and day-old chicks. Foster has nearly 20,000 laying hens now, and will market this year between 2,000,000 and 3,000,000 eggs.

Anyone who "raises eggs," either for market or the home table, should of course know all about the system used in this huge business. "**THE MILLION EGG FARM**" gives the whole story: How the stock is raised, how the hens are fed, all about the "Rancocas Unit" (which is one of the most interesting features to owners of a few chickens), how Foster started and the mistakes he made, how novices should start, and what to avoid. A really wonderful story of success.

Curtiss Poultry Book tells how Roy Curtiss, a farmer's boy, starting with a few neglected hens, has built up at NIAGARA FARM one of the **best-paying poultry plants in the world**. Roy agreed that if his father would furnish the feed, he (Roy) would supply eggs and chickens for the farm table, and all left over were to belong to him. In two years Roy was using so much feed that his father had to cry quits, but the boy kept right on. His brother joined him, and the business grew and grew. But they had no guidance, and had to learn by their own mistakes. Such a guide as the **Curtiss Poultry Book** would have saved them thousands of dollars. This capital book was written right at Niagara Farm by the veteran poultryman, **Michael K. Boyer**. He says he never saw a general poultry plant so well managed. Every day shipments go off, every day money comes in. Their percentage of fertile eggs, of live, strong chickens hatched, of day-old chicks shipped without loss, is really wonderful. This book gives all their methods and feed formulas, tested and improved by years of experience. Many pictures. Whether you raise chickens, ducks, or eggs, have a dozen fowls or thousands, you will find in this book help that you can get in no other way.

"Poultry Secrets" is a remarkable collection of successful "wrinkles" in poultry-raising, secured and edited by **MICHAEL K. BOYER** (known to poultrymen as "Uncle Mike"). Many of these were treasured secrets of famous poultrymen, guarded with jealous care because of their great value. We paid hundreds of dollars for them. This is the **ELEVENTH EDITION**, and thousands are using these methods with great profit. W. R. Curtiss tells his successful method of hatching **50 per cent** more pullets than cockerels; the Philo system is described and explained; the "15-cents-a-bushel" and "8-cents-a-bushel" green feed secrets; secrets of the Angell, Palmer, and Hogan Systems; Boyer's method of absolutely insuring fertility of eggs for hatching; Townsend's system for preventing death of chicks in the shell; Felch's famous mating chart, suppressed for many years; feeding and fattening secrets; and **MANY OTHER PRICELESS SECRETS**, are here disclosed for the first time.

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Farm Journal is the standard paper for everyone who grows or wants to grow fruit, vegetables, poultry, or stock of any kind. It is 33 years old, and has over 800,000 subscribers, in all parts of the country. "Judge Biggle" and "Peter Tumbledown" are characters far better known to many than Hamlet or Micawber. It has a fine poultry department, more valuable than most poultry papers. It is a favorite paper with housekeepers. Clean, clever, cheerful, amusing, intensely practical. Cut to fit everybody, young or old, village, suburbs, or rural routes. Unlike any other paper and always has been.

FARM JOURNAL, 101 Clifton Street, Philadelphia.

In Illinois, but very few ever secure a paying crop. About all are satisfied if they received a little for family use. Last spring an old fellow was in this and the adjoining county, selling a patent-right to a "spring frame" hive. The patent was issued in 1885. He sold his right (?) for \$10, and agreed to care for the bees of the purchasers during the season of 1910. He did a land-office business, but in no instance did he comply with his agreement by oversight of the bees. My attention was called to his methods and hive, and I advised against their use, giving my reasons and urging all to read bee-papers and standard bee-literature.

The old man told several of his customers that he was going to call upon me, but he never showed up nearer than my next bee-keeping neighbor, about $\frac{1}{2}$ mile distant. I was careful to follow up results, and in every instance the purchasers lost their bees.

When will men cease to bite at the wiles of the patent-right vendor? When will they use ordinary judgment in the use of means for intelligently informing themselves as to the best ways of doing things?

This does not seem to be a very good bee-country. I averaged \$4.00 per colony last season, in extracted honey. The honey-flow lasted about 2 weeks during Spanish-needle and heartsease. The quality was very good, and light amber in color. I have lived in Southern Illinois during the seasons of 1909 and 1910, and may not be a good judge of the locality.

H. F. HITCH.
Harrisburg, Ill., Jan. 19.

THE NEW FARMER

The "rube" has been succeeded by the "agriculturist." There's as much difference between the "rube" and "agriculturist" as between corn and cucumbers. The modern farmer is a business man, a student, and a progressionist. The result is a great change in cultural methods.

Mould-board plows and drag cultivators are being replaced by "Cutaway" tools. Farmers now realize that cultivation is not merely a matter of softening the ground. Thorough, frequent cultivation stirs the soil, lets in air and sunshine and new life, killing foul vegetation. "Cutaway" tools effect perfect sub-soil connections; save time and labor; increase crops 25% to 50%.

Send postal to-day to The Cutaway Harrow Co., Higganum, Conn., for new booklet "INTENSIVE CULTIVATION." It's free.

Adv.

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T. S. HALL,
TALKING ROCK, PICKENS CO., GA.

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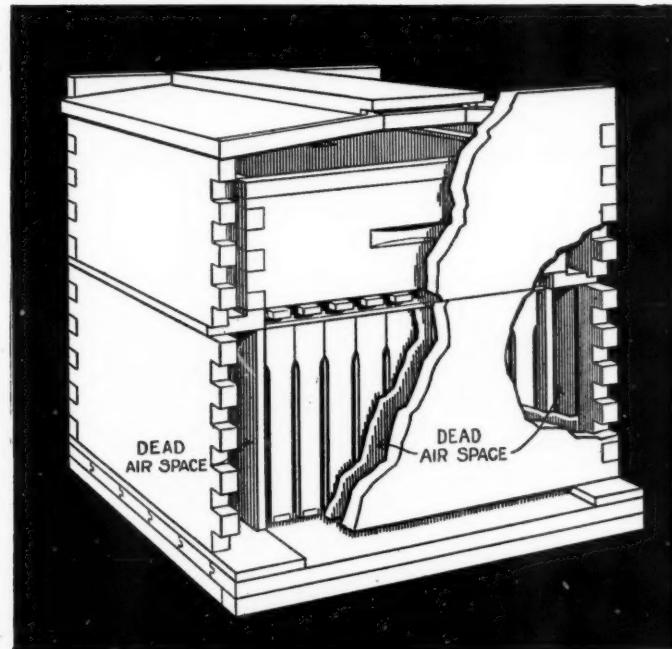
PROTECTION HIVE

All arguments lead to a matter of protection, look where you may. Dead-air spaces or packing, as you prefer

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carefully selected and bred for Business. All Queens guaranteed Pure and Free from Disease. Prices:

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Tested—each, \$1.25; per dozen, 12.00

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Read how two egg-raisers cleared
in one year \$6.41 per hen, or over

\$12,000 PER YEAR

on their flock of 1953 hens.

THE ordinary poultryman will say it can't be done—that \$2 to \$3 per hen is the very utmost that even an expert can make, clear. He will say that even if a few experienced men could make \$6.41 per hen, it is impossible for two mere beginners to do it.

And yet that is exactly what the Cornings, father and son, DID DO in 1908. Starting five years ago with only 30 hens, with no experience, with Prof. Gowell's bulletins as their foundation, with many experiments and much hard work, this was the result in 1908—over \$12,000 profit from 1953 laying pullets. Read the whole story in the

Corning Egg-Book

(entitled "**\$6.41 per Hen per Year**"). Not what the Cornings might do, or could do, or want to do, but what they DID DO. No impossibilities, no wild promises of fortunes from a few hens in a dry-goods box. Simply a cool, careful, comprehensive account of how scientific egg-raising makes money (\$12,000 per year) for two hard-headed business men.

Are all Recognized Poultry Systems Back Numbers?

The Corning Egg-Book tells everything—where the Cornings find their market, why they raise only white-shelled, sterile eggs, how they keep hens laying regularly in winter, when they hatch chicks that are to do their best work in December and January, how to mix the feed that produces the most eggs, how to prevent losses, how they found the best breed for egg-producing, and how their whole system works to that one end—EGGS, EGGS, EGGS. Many photographs of the Cornings' Sunny Slope Farm, with complete working plans of their buildings, showing brooder and laying houses, colony houses, breeding pens, door and floor construction, etc., etc. From these plans any builder can reproduce the plant, in whole or in part.

(This last winter the Cornings had 3000 hens, and in January were getting 75 cents per dozen for eggs.)

So important has the poultry industry of the country become, and so valuable do we consider this book to all poultry owners, that we have made arrangements with the publishers of the Corning Egg-Book which enable us to make the following extraordinary offer:

COMBINATION OF { One copy "CORNING EGG-BOOK"
AMERICAN BEE JOURNAL, 1 year } ALL FOR \$1.25
FARM JOURNAL, 2 years } ONLY

Surely this is a wonderful bargain for anyone interested in poultry. So many bee-keepers keep chickens that we feel sure that hundreds of our readers will avail themselves of this unexpected opportunity. Address all orders to George W. York & Co.,

Chicago. Please use the coupon.

FARM JOURNAL has for thirty-three years conducted a poultry department known the country over for the ability of its editors and the value of its contents. It is the standard monthly farm and home paper of the country, with already more than 750,000 subscribers. It is for the poultryman, gardener, fruitman, stockman, trucker, farmer, villager, suburbanite, the women folks, the boys and girls. **Regardless of what you may think NOW, you will find Farm Journal is for YOU too.** Clean, clever, cheerful, intensely practical.



Coming Laying House No. 2. 1500 hens in 2560 sq. ft.

Cut out and send this Coupon

GEORGE W. YORK & CO., Chicago, Ill.

Enclosed find \$1.25, for which send me the great "Corning Egg-Book," postpaid, "Farm Journal" for two years, and "American Bee Journal" for one year.

Name.....

P. O.

R. F. D. State

American Bee Journal

Wants, Exchanges, Etc.

[Advertisements in this department will be inserted at 15 cents per line, with no discounts of any kind. Notices here cannot be less than two lines. If wanted in this department, you must say so when ordering.]

FOR SALE—160-lb. honey-kegs at 50c each f. o. b. factory. N. L. Stevens, Moravia, N. Y.

ITALIAN Untested Queens, 75 cents; Tested, \$1.25. Breeders, \$5.00 each. E. M. Collyer, 8A12t 75 Broadway, Ossining, N. Y.

FOR SALE—Duston White Wyandottes, \$2; 15 eggs, \$1; \$5 per 100. 11A1y Elmer Gimlin, Taylorville, Ill.

WANTED—Early orders for the Old Reliable Bingham Bee-Smokers. Address, 12A1f T. F. Bingham, Alma, Mich.

WANTED—1000 dead queens, and 1000 dead drones. Am. Apiculture & Farming Co., 12A3 2623 Emerson Ave., St. Louis, Mo.

WANTED—A few more 4 and 5 year old Queens; also bees. C. O. Smith, 5533 Cornell Ave., Chicago, Ill.

WANTED—by a single man of good character, work in apiary the coming season. 2A1t S. S. Clark, McCook, Nebr.

FOR SALE—Best bee-outfit in Iowa; or will trade for U. S. or Can. land offers. 2A1t D. E. Lhommedieu, Colo. Story Co., Iowa.

SILVER LACED WYANDOTTE.—Stock and eggs, from prize winners, \$1.50 for 15. Pearl Guinea eggs, \$1.00 for 15. 2A1t H. McMahon, Middlefield, Ohio.

FOR SALE—Golden Queens that produce 50 to 100 percent 5-banded bees. Untested, \$1; Tested \$1.50; Select Tes, \$2; Breeders, \$5 to \$10 8A12t J. B. Brockwell, Bradley's Store, Va.

S. C. W. LEGHORN cockrels, 75c to \$1.50; eggs in season, \$5.00 and \$7.00 per 100. Chicks \$9.00 per 100. Circular free. 2A1t C. H. Zurburg, Topeka, Ill.

FOR SALE—White Wyandotte eggs, 15 for \$1.00; Indian Runner Duck eggs, 12 for \$1.00. 1 sitting, express paid, \$1.40; 2 sittings, \$2.25. 2A1t J. F. Michael, Winchester, Ind.

OUR CATALOG of Poultry, Bees, Bee-Supplies, with free premiums now ready, and yours for the asking. Send for it. Bargain offers and information. H. S. Duby, 1A2t St. Anne, Ill.

FOR SALE.—80-acre farm, 70 miles south of Chicago; running water; 20 acres of timber; fruit, and 1250 bearing grapevines. Cheap for cash. Wm. W. Black, 2A3t 2358 Indiana Ave., Chicago, Ill.

FOR SALE.—Full line Falconer 8-frame Dovetailed Hives in flat; never removed from crates. Also Swarthmore entrance guards. Write for prices. If taken at once will sell very reasonably. Mrs. Helen M. Ferrie, Hackettstown, N. J.

SITUATION WANTED—By a young man who has successfully passed examination after taking course of lectures and practical work in Apiculture at the Ontario Agricultural College. Any one desiring help of this kind for the season of 1911, kindly correspond with— Morley Pettit, Provincial Apiarist, Ont. Agri. College, Guelph, Ont.

BACK NUMBERS WANTED.—I still need of Vol. XXXIV (1894) Nos. 8, 11, 12, and 16, to complete my files of the American Bee Journal for 1893. Jan. 1st and 15th, Feb. 15th, and March 1st and 15th; of the Bee-Keepers' Review, January, 1890, and February, 1893. I will be glad to hear from any one who is able to furnish all or any of these missing copies. Address, Morley Pettit, Provincial Apiarist, Guelph, Ont.

Colonies of Italian bees in L. hives, 10-fr. built on full brood-fdn., wired, body and sh. super, redw., dovet., 3 coats white, sheeted lids, each neat, modern and full-stored—any time. Jos. Wallrath, Antioch, Cal. 2A1f

HONEY BUSINESS FOR SALE.—Wholesale business established many years in one of our largest cities. Write for particulars. Address, Honey Merchants, care American Bee Journal, 117 N. Jefferson St., Chicago, Ill.

FOR SALE.—500 3 and 5 Band Queens. Not Cheap Queens, but Queens Cheap. 3-Band Queens as follows: Untested Queens—1 for 75 cts.; 6 for \$4.20. Tested Queens—1 for \$1; 6 for \$5.70. 5-Band Queens as follows: Untested Queens—1 for \$1.00; 6 for \$5.70. Tested Queens—1 for \$1.50; 6 for \$8.70. Directions for Building Up Weak Colonies, 10 cts. 2A1f W. J. Littlefield, Little Rock, Ark.

BEESWAX WANTED.—We are paying 30 cents, cash, per pound for good, pure yellow beeswax delivered at our office. If you want the money promptly for your beeswax, ship it to us, either by express or freight. A strong bag is the best in which to ship beeswax. Quantity and distance from Chicago should decide as to freight or express. Perhaps under 25 pounds would better be sent by express, if distance is not too great. Address, GEORGE W. YORK & CO., 117 N. Jefferson St., Chicago, Ill.

A WONDERFUL PHOTOGRAPH.—I have photographed a mountain range 95 miles away, beating all previous records by 30 miles. Better still, I have made a picture, a most unusual thing in tele-photography. The subject is Mount Baker, Wash., a snow-clad mountain 11,100 feet high; the point of view is Victoria, British Columbia. For beauty the scene is not excelled on earth. In the immediate foreground is a solid bank of primeval forest, then come the Haro Straits, 45 miles wide, dotted with many islands; next rise the foothills blending into the snowy grandeur of the Rocky Mountains, with Baker towering high above—a silent sentinel. I have also photographed the Olympic Mountains, Wash., from Victoria, a distance of 65 miles, again getting a picture. It took me 18 months' persistent effort to get them, but I will not bother you with my troubles. I am selling prints from the original negatives, 6 1/2 x 8 1/2, at \$1.50 each, but will supply the pair for \$2.00. They are printed on heavy cream paper, ready for framing. F. Dundas Todd, Market St., Victoria, B. C., Canada.

Honey to Sell or Wanted

WANTED—White clover, basswood and amber extracted honey. Give prices and description. P. B. Ramer, Harmony, Minn.

FOR SALE.—Choice light-amber extracted honey—thick, well-ripened, delicious flavor. Price 9 cents per lb. in new 6-lb. cans. 2A1f J. P. Moore, Morgan, Ky.

WANTED—Choice extracted white and amber honey in barrels or cans. Send sample, and price delivered f. o. b. Preston. 11A1f M. V. Facey, Preston, Minn.

HONEY WANTED.—We are in the market for both extracted and comb honey. Let us know what you have, with sample of extracted honey, lowest prices f. o. b. Chicago, how put up, etc. Address,

GEORGE W. YORK & CO., 117 N. Jefferson St., Chicago, Ill.

FOR SALE.—A good location for bees, poultry and trucking. Twelve acres. Eight in cultivation, balance occupied by buildings and a small piece of woods. Eight-room brick dwelling that is worth all that is asked for the entire place. A big bargain to the right man. Terms very easy. Particulars free. Geo. H. Rea, Reynoldsville, Pa.

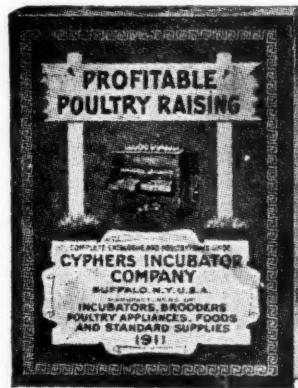
Making Hens Lay.—Although it is now midwinter, a great deal of poultry is just recovering from the moult. This should have been completed by December, and not two months later. However, it is not too late to get hens into laying condition, and if poultry owners will adopt correct feeding methods, they may soon be getting a full egg crop. It

is only those who do not get winter eggs who say that poultry is an expense. Those who feed fresh cut bone and other egg-making food know that poultry is a source of profit, and especially in winter, when so many owners do not feed their flocks intelligently.

The primary lesson for poultrymen to learn is that food—proper food—makes hens lay, and the lack of it—not the weather—stops them.

Of all egg-making food fresh cut bone combines in the highest degree egg-forming elements and cheapness. The work of cutting it in a Humphrey always-open hopper bone cutter is not hard. A child can turn this easiest of all cutters, and it is the work of only a few minutes to cut enough fresh bone for a large flock of chicks. The Humphrey is a bone cutter that does not need to be cleaned, and it possesses other exclusive advantages. Don't judge a Humphrey by what you may have had. Send for their splendid free book, "The Golden Egg," and learn how to feed and care for chickens from the egg to the ax. You will find it one of the most helpfully instructive books on poultry published. Write today, addressing, Humphrey, Ambee Street Factory Joliet, Ill.

New Guide Book to Poultry Raising.—A book that should be in the hands of every man or woman who is really in earnest on the subject of poultry-raising, and who wants to get out of poultry all the profits that are in it, has just been issued by the Cyphers Incubator Company, Dept. 83, Buffalo, N. Y. It is their 1911 Big Catalog and



Poultryman's Guide, entitled, "Profitable Poultry Raising," a handsome book of 212 pages, which will be mailed free to every reader who will mention the American Bee Journal.

This big free book tells all about America's Billion Dollar Industry—tells why the farmer is the natural poultryman, and why farmers who do not raise chickens on a goodly scale are overlooking one of their most important crops.

It illustrates many of the greatest poultry plants in the country, together with pictures of prize-winning birds, farm scenes, showing how poultry can be raised, nurtured, housed and handled to the greatest advantage. It also pictures and describes Cyphers Incubators and Brooders and Cyphers Standard Poultry Specialties. It will be interesting to the farmer, his wife, or daughter, who realize how much poultry profits mean to the family income. We advise our readers to send a postal request for this valuable free poultry book at once. Address, the Cyphers Incubator Company, Dept. 83, at the place of business nearest you, as follows:

Factory and Home Office: Dept. 83, Buffalo, N. Y. Branches and Store Rooms, Dept. 83, New York City, 21 Barclay St.; Dept. 83, Chicago, Ill., 340-344 North Clark St.; Dept. 83, Boston, Mass., 12-14 Canal St.; Dept. 83, Kansas City, Mo., 317-319 Southwest Boulevard; Dept. 83, Oakland, Calif., 1569 Broadway.

Early Days of Artificial Incubation.—Geo. H. Stahl a pioneer in an industry that has grown to wonderful proportions, has been at it 32 years. Though his first incubator was very crude—still it was on the right principle, did its work, lived up to every promise made for it, and really hatched chicks. It was the first machine to be taken seriously and looked upon as a really scientific hatcher.

In talking over the early days of the busi-



American Bee Journal

ness some weeks ago, Mr. Stahl said: "Our first aim was a machine that would actually hatch every fertile egg that we can put into it. One that could be relied upon to surely and accurately do its work. Then we started simplifying the machine so that any one could understand its workings and run it successfully. How successful we were is shown by the records of the machines we have on the market today."

Mr. Stahl manufactures the "Excelsior" Incubators and Brooders, the "I. X. L." Incubator and Brooder Combination, and the "Wooden Hen." A request to Mr. Geo. H. Stahl, of Quincy, Ill., mentioning this paper, will bring you his new 1911 catalog free. Why not write for it today?

Blizzard Belt Strawberries.—The Gardner Nursery Co., Osage, Iowa, will send you 2 Giant "Blizzard Belt" strawberry plants (worth 30 cents). Free of Charge, for testing upon receipt of your name and address.

These berries are large in size and of the finest quality and flavor.

There are no strings to the offer, they simply want to get you to try this wonderful berry.

One customer who set out two of these plants in the spring of 1909, picked 12 quarts of delicious fruit from his test bed last summer.

You can do just as well.

If you care to add 10 cents for mailing expense, the Gardner Nursery Co., Osage,

Learn the Cyphers Way of Intensive Chicken Farming for Bigger Profits

REMEMBER, chicken-raising is a *business*—to be gone about in a business-like way.

The best incubator is not too good for you.

The Cyphers has absolutely no heat or moisture worries—no ventilation or regulation uncertainties.

No leaky tanks to spoil your hatches. It has a Patented Diffusive Principle—the only perfect, dependable plan of even heat-distribution. Found in no other incubator.

It is the World's Standard Hatcher. Used by more Government Experiment Stations, more large poultry plants, more leading fanciers, than all others put together.

Fire-Proof and Insurable

Cyphers Incubators and Brooders were the *first* to receive the official Fire Insurance Inspection Labels. Every Cyphers machine bears this label—your protection.

The Cyphers Incubator is fully and positively guaranteed.

Write At Once For Big Free Book

"Profitable Poultry Raising" contains 204 pages of valuable helps, hints and experiences. It pictures and describes Standard Cyphers Incubators and Brooders, Poultry Supplies and Laboratory Products.

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Please mention Am. Bee Journal when writing.

BINGHAM
CLEAN
BEE SMOKER



The above prices deliver Smoker at your post-office free. We send circular if requested.

Original Bingham & Hetherington Uncapping-Knife.

HAND-MADE SMOKERS

Extracts from Catalogs—1907:

Chas. Dadant & Son, Hamilton, Ill.—This is the Smoker we recommend above all others.

G. B. Lewis Co., Watertown, Wis.—We have sold these Smokers for a good many years and never received a single complaint.

A. I. Root Co., Medina, Ohio.—The cone fits inside of the cup so that the liquid creosote runs down inside of the smoker.

All Bingham Smokers are stamped on the tin, "Patented 1878, 1892, and 1903," and have all the new improvements.

Smoke Engine—largest smoker made.....\$1.50—4" inch stove

Doctor—cheapest made to use.....1.10—3½ "

Conqueror—right for most apiaries.....1.00—3 "

Large—lasts longer than any other.....90—3½ "

Little Wonder—as its name implies.....65—2 "



Patented, May 20, 1879. **BEST ON EARTH.**

T. F. BINGHAM, Alma, Mich.

Iowa, will send you a two-year-old Baby Evergreens in addition to the Free giant "Blizzard Belt" strawberry plants.

Send your name and address today for plants and The Gardner Nursery Company will send you their Catalog and Bargain Sheets of Hardy "Blizzard Belt" fruits by next mail.

The plants will be mailed you at proper planting time. Please mention the American Bee Journal when writing.

Wanted

Fine Qualities of
White and Light Amber
Extracted Honey

Send samples with Lowest Prices, f. o. b. New York. Also state how it is packed, an the quantity you have.

We are always in the market for

Beeswax

HILDRETH & SEGELKEN,
265-267 Greenwich St.,
NEW YORK, N. Y.

Please mention Am. Bee Journal when writing.

Marshfield Sections

Best Dovetail Hives
with Colorado Covers

Hoffman Frames, and everything pertaining to Bee-Keepers' Supplies sold at **Let-live Prices.**

Berry Boxes, Baskets, Crates, etc.
kept in stock. **Wholesale and Retail.**
Prices sent for asking.

W. D. Soper, 323 and 325 Park Ave. **Jackson, Mich.**
Please mention Am. Bee Journal when writing.

Sweet Clover Seed!

Sweet Clover is rapidly becoming one of the most useful things that can be grown on the farm. Its value as a honey-plant is well known to bee-keepers, but its worth as a forage-plant and also as an enricher of the soil are not so widely known. However, Sweet Clover is coming to the front very fast these days. Some years ago it was considered as a weed by those who knew no better. The former attitude of the enlightened farmer today is changing to a great respect for and appreciation of Sweet Clover, both as a food for stock and as a valuable fertilizer for poor and worn out soils.

The seed can be sown any time from now until next April or May. From 18 to 20 pounds per acre of the unhulled seed is about the right quantity to sow.

We can ship promptly at the following prices:

Postpaid, 1 pound for 30 cents, or 2 pounds for 50 cents. By express f. o. b. Chicago—5 pounds for 75c; 10 pounds for \$1.20; 25 pounds for \$3.00; 50 pounds for \$5.50; or 100 pounds for \$10.00.

If wanted by freight, it will be necessary to add 25 cents more for cartage to the above prices on each order.

If seed is desired of the Yellow Sweet Clover, add 3 cents per pound to the above prices.

George W. York & Company,

117 N. Jefferson St., CHICAGO, ILL
Please mention Am. Bee Journal when writing.

"The Townsend Bee-Book"

This is a new publication of 87 pages, 6 by 9 inches in size. It is a practical treatment of the subject, "How to Make a Start in Bees," by Mr. E. D. Townsend, of Michigan, one of the most extensive and successful bee-keepers in the United States. In 11 chapters Mr. Townsend tells just how to manage bees for the largest success. 50 cents. If you wish a copy in connection with a year's subscription to the American Bee Journal, send \$1.35 to this office, 117 N. Jefferson St., Chicago, Ill.

Lewis Catalog.—We have received a copy of the annual catalog of the G. B. Lewis Co., of Watertown, Wis., the cover of which is gotten up in very attractive colors and special design. The G. B. Lewis Co. are among the largest and most reliable manufacturers of bee-keepers' supplies in the world. Their brand is "Beeware."

American Bee Journal



"If goods are wanted quick, send to Pouder"
(Established 1880)

BEE-SUPPLIES

Standard hives with latest improvement; Danzenbaker Hives, Sections, Comb Foundation, Extractors, Smokers—in fact, everything used about the bees. My equipment, my stock of goods, the quality of my goods, and my shipping facilities, can not be excelled.

Paper Honey-Bottles

for Extracted Honey. Made of heavy paper and paraffin coated, with tight seal. Every honey-producer will be interested. A descriptive circular free.

Finest **White Clover Honey** on hand at all times.
I buy **Beeswax**. Catalog of supplies free.

Walter S. Pouder, Indianapolis, Ind.

859 Massachusetts Ave.

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CAPONS bring the largest profits
—100 per cent more than other poultry. Caponing is easy and soon learned. Progressive poultrymen use

PILLING CAPONIZING SETS

Postpaid \$2.50 per set with free instructions. The convenient, durable, ready-for-use kind. Best material. We also make Poultry Marker 25c, Gape Worm Extractor 25c, French Killing Knife 50c. Capon Book Free. G. P. Pilling & Son Co., Philadelphia, Pa.

Please mention Am. Bee Journal when writing.

Cook's Honey-Jar.

With patent AIR-TIGHT SANITARY STOPPER is the Best and Cheapest Honey-Jar made. Sold only by

J. H. M. Cook, 70 Cortlandt St., N. Y. City.

Send 10 cents (half postage) for sample Jar, and catalog of WELL-BRED BEES, QUEENS, HIVES, etc.

The oldest Bee-Supply Store in the East.

This Bone Cutter



produces filled egg baskets. Cuts fast and easy. Green bone, scraps from table, vegetables, scrap cake. Always ready for use. Send for catalog.

WILSON BROS., Box 814 EASTON, PA.

BETTER FRUIT

The best fruit growers' illustrated monthly published in the world. Devoted exclusively to modern and progressive fruit growing and marketing. Northwestern methods get fancy prices, and growers net \$200 to \$1000 per acre. One Dollar per year. Sample copies free.

Better Fruit Publishing Co. **HOOD RIVER, OREGON.**

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Your Copy is ready and free for the asking. 100th edition of the ROOT Catalog and Descriptive Price-List.

It is with a feeling of pardonable pride that we present to our bee-keeping friends throughout the world this 100th edition of our catalog of bee-keepers' supplies. For 41 years we have been engaged solely in the manufacture of apicultural products, and it is a pleasure indeed to acknowledge the hearty appreciation and reward that have come from our devotion and desire to establish this industry on a more firm and profitable footing, and to simplify rather than make complex, the various implements required to practice the pursuit with a maximum of pleasure and profit from a minimum expenditure of effort.

Being engaged in practical bee-keeping ourselves, and always in correspondence with bee-keepers in every part of the world, our office has become a veritable clearing-house of matters apicultural.

* * * * *

This is a book of useful and essential supplies for bee-keepers. Whether the recipient is a mere tyro—even a prospective bee-keeper, or whether engaged in bee-keeping along most extensive lines—this is the book that tells what is needed to obtain best results—that points out and explains wherein this article is better than that, and shows and describes the tools of beedom from A to Z.

* * *

Extracts from Foreword to 1911 Catalog ROOT'S Bee-Keepers' Supplies.

Call, write or 'phone, but be sure you get your Copy.

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R. W. BOYDEN, Mgr.

(JEFFREY BUILDING)

Telephone 1484 North.

American Bee Journal

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Is the Place to
Buy Your Bee-Ware.

Griggs

Is the Man who can
Tell You What to Use
and How to Use It.

He is a Practical Bee-man of 25 years' experience. Send to him for his CATALOG—at the Old Stand—

S. J. Griggs & Co.,
24 North Erie St.,
TOLEDO, - OHIO.

"GRIGGS THE KING-BEE."

Please mention Am. Bee Journal when writing.

Latest Improved Supplies,
Incubators & Brooders

Catalogs Free—state which.
Send 25 cts. for Illustrated Bee-book for beginners—“A gem,” Dis. for early orders.

J. W. Rouse, Mexico, Mo.
Please mention Am. Bee Journal when writing.

Bee-Supplies

We are Western Agents for **Falconer**

“Falconer”

Write for Catalog.

C. C. Clemons Bee-Supply Co.
128 Grand Ave., Kansas City, Mo.
Please mention Am. Bee Journal when writing.

Queens! Queens!

Ready April 15th. Mail your orders NOW to insure your Queens when you need them.

Tested, \$1.25; Untested, \$1.00.

We breed Carniolans, 3-Band Italians, Caucasians, and Goldens.

Address,

JOHN W. PHARR,
Berclair, Goliad Co., Tex.
Please mention Am. Bee Journal when writing.

Wanted Old Combs and Slumgum. Will work it for half and pay 30 cents a pound for your share of wax. A. A. LYONS, 8A2t Rt. 5, Box 88, Ft. Collins, Colo.

Please mention Am. Bee Journal when writing.

\$5.20 Buys My Double Wall, Hot Water Fifty Egg Incubator

A better machine for the money cannot be had. Guaranteed to hatch every fertile egg. Double walls. Hot water tank covers entire top of egg chamber. Absolutely self-regulating. I've built incubators for 30 years.

600,000 Satisfied Users of Stahl Incubators

100 egg size, price \$7.50
200 egg size, " \$9.50
80-page catalogue shows full line of Excelsiors, Wooden Hens, Brooders, etc. Write for it to-day.

GEO. H. STAHL
Box 216-B, Quincy, Ill.

THINK OF IT

Ask the editor of this paper if Stahl and his incubator are right.

MARSHFIELD GOODS

BEE KEEPERS:—

We manufacture Millions of **Sections** every year that are as good as the best. The **CHEAPEST** for the Quality; **BEST** for the Price. If you buy them once, you will buy again.

We also manufacture **Hives, Brood-Frames, Section-Holders and Shipping-Cases.**

Our Catalog is free for the asking.

Marshfield Mfg. Co.,

Marshfield, Wis.

The Billion Dollar Hen

Yes, that is just where the chicken of today stands, and great fortunes are being made each year with only a few hens and a small piece of idle ground.

But You Must Know How.

The American Hen Magazine is the “A B C and X Y Z in Poultry.” It is a poultry magazine with a regular department devoted to Fruit an Bees, and gives the Secrets of Poultrydom in plain language.

Price 25 cents a year. Descriptive Circular Free.

American Hen Magazine, Council Bluffs, Iowa.

“Scientific Queen-Rearing”

No other book compares with this one written by Mr. G. M. Doolittle. He is an expert in the business. It tells just how the very best queens can be reared. Bound in cloth. By mail, \$1.00; or with the American Bee Journal, one year—both for \$1.60. In leatherette binding, 75 cents, postpaid; or with the American Bee Journal one year—both for \$1.25. Send to the American Bee Journal.

Bee Journal “Could Hardly Be Better”

BRO. YORK:—Both the outside and the inside of the American Bee Journal could hardly be better. The covers are artistic and attractive, and the articles and editorials full of information. The whole bee-keeping fraternity is indebted to you for providing such a storehouse of information, and any one interested in bee-keeping can not well do without it. May the coming year—1911—bring you and your gentle readers much happiness and prosperity.

(Dr.) FREDERICK WEBLEY.

Santa Cruz, Cal., Dec. 15, 1910.

Comb Foundation BEE - KEEPERS' SUPPLIES

It is made on new improved machines, and the Bees take to it more readily than any other Comb Foundation on the market.

Dittmer makes a Specialty of
Working Your Wax into Comb Foundation for You.

Our Wax Circular and Bee-Supply Price-List Free upon application.

Write us your wants—it is no trouble to us to answer letters.

Gus Dittmer Company, - Augusta, Wisconsin.

Please mention Am. Bee Journal when writing.



Mr. Bee-Man

We carry in stock the well-known

**Lewis Beeware, Bingham
Smokers, Dadant's Foun-
dation, or Anything the Bee-Keeper may
need.** Catalog Free.
Beeswax Wanted.



The C. M. Scott Co., 1004 E. Wash. St. Indianapolis, Ind.

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The National Poultry Journal

FOR EVEN LESS

If you take advantage of this liberal offer. The NATIONAL is an up-to-date poultry paper, published monthly in honor of Her Majesty, the American Hen. Devoted to practical poultry keeping in all its branches, it will help you make more money out of your poultry. Try it a year at our expense, by sending us your name and address plainly written, and enclosing only fifteen (15) cents to help pay postage, and we will send you the NATIONAL for one full year. Address,

The National Poultry Journal, Business Office, Elkton, W. Va.

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**ARND HONEY & BEE-SUPPLY CO. NOT
INC.**

(Successors to the York Honey & Bee-Supply Co.)

148 West Superior St., CHICAGO, ILL.

Send for Catalog.

Enough said!



FENCE Strongest Made

Made of High Carbon Double Strength
Coated Wire. Heavily Galvanized to
prevent rust. Have no agents. Sell at
factory prices on 30 days' free trial.
We pay all freight. 37 heights of farm
and poultry fence. Catalog Free.
COILED SPRING FENCE CO.
Box 89
Winchester, Indiana.

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Humphrey's newest book, "The Golden Egg," will show you how to get eggs all winter, and from 150 to 250 eggs a hen a year. I will give you, FREE, my secret of reducing feeding cost one half and of doubling your poultry income.

Humphrey, Amber Street Factory, Joliet, Ill.
Where Humphrey's Bone Cutters, Clover Cutters, Brooders and other Poultry Helps are made.



**COFFEE
ONE CENT PER
POUND**

**Salzer's French
Bean Coffee
(SOJA HISPIDA)**

A wholesome drink! The healthiest ever; you can grow it in your own garden on a small patch 10 feet by 10 producing 50 lbs. or more. Ripens in Wisconsin in 90 days. Used in great quantities in France, Germany and all over Europe.

Send 15 cents in stamp and we will mail you a package giving full culture directions, as well as 500 seeds of Salzer's free, or send \$1 cents and get, in addition to above, 10,000 kernels unsurpassed vegetable and flower seeds, enough for bushels of onions, different vegetables and brilliant flowers.

**JOHN A. SALZER SEED COMPANY
210 South 8th St. La Crosse Wis.**

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Farmer BOY'S \$1000⁰⁰

For a single ear of corn
5,000 smaller prizes
By the man who has
given more prizes and more fine corn than
any other man in the world. Get ready for
the contest. All particulars and a big
package of pedigree seed corn free. Address
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buys the Emerson Typewriter. Made
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\$50 now—later the price will be
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Entirely Nickel Plated. Back spacer,
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THE EMERSON TYPEWRITER CO.,
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WONDERFUL FALL-BEARING Strawberry

Fruits in Fall of first year and in Spring and Fall
of second year. **Better than a gold
mine.** 500 plants set in Spring of 1910
produced in Aug., Sept., Oct. and
Nov. nearly 400 quarts, which
sold at 40c to 50c per qt. netting
us over **\$2,000 to the acre.**
We are headquarters for these
plants. Also all other Berry Plants
—Plum Farmer, Idaho and Royal
Purple Raspberries, Norwood and
Early Ozark Strawberries. Hastings
Potato. 28 years experience. Catalog will be sent you
free. Write to-day. **L. J. FARMER, Box 148, PULASKI, N.Y.**



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13½ Cents a Rod

For 18-in. 14 3-4c for 22-in. Hog
Fence; 15c for 26-inch; 18 3-4c
for 32-inch; 25c for a 47-inch
Farm Fence. 48-inch Poultry
fence \$8 1-2c. **Sold on 30 days
trial.** 80 rod spool Ideal Barb
Wire \$1.45 Catalogue free.
KITSelman Bros.,
Box 66 MUNCIE, IND.

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American Bee Journal

HONEY AND BEESWAX

CHICAGO, Jan. 26.—The honey market is fairly active, and prices are well maintained. We get from 17@18c for the best grades of white comb honey. The amber grades range from 12@15c, with those that are of poor flavor and out of condition selling at a lower price. Extracted is in good demand, and very little of the clover and linden grades are obtainable, and now bring 10c per pound. Other white grades range from 8@9c, according to body, flavor, etc. Beeswax is in good demand at 32c per pound, if bright in color and free from sediment.

R. A. BURNETT & CO.

CINCINNATI, Feb. 6.—The demand for comb honey has slackened up to such an extent that those who have any on hand are sacrificing it in order to get rid of it. On the other hand, it does not seem as if the trade is craving for honey in the comb at this time of the year. Extracted honey is not moving as freely as we expected, nevertheless for strictly fancy we are getting from 9@10c in 60-pound cans, 2 cans to the crate, according to the quality and quantity bought. Amber honey in barrels, from 6@7c. We are paying 30c cash, or 32c in trade for nice bright yellow beeswax free from dirt.

THE FRED W. MUTH CO.

INDIANAPOLIS, Jan. 26.—There is a good and steady demand here for best grades of comb and extracted honey. Jobbing houses are well supplied, but practically none is now being offered by producers, and it is evident that there will be a shortage before the new crop can arrive. Fancy white comb is being offered at 18c; No. 1 white at 17c; extracted, 11c, with some slight reductions on quantity lots. It is presumed that producers are being paid about 2 cents less than above quotations. Producers of bees-

wax are being paid 28c cash, or 30c in trade.

WALTER S. PODER.

KANSAS CITY, Mo., Jan. 26.—The supply of extracted honey is light, the demand for white extracted is fair, but amber extracted is very slow sale. Supply of comb is light, and the demand good. We quote: No. 1 white comb honey, 24-section cases, per case, \$3.50; No. 2, \$3.25; No. 1 amber, \$3.25; No. 2, \$2.75@3.00 Extracted, white, per lb., 9@10c; amber, 7@7.5c. Beeswax, 28@30c.

C. C. CLEMONS PRODUCE CO.

CINCINNATI, Jan. 26.—Comb honey is in fair demand, and same is selling at \$3.75 per case for No. 1 white. Amber extracted in barrels is selling at 7c; in cans, 7@8c. White extracted honey in 60-lb. cans 9@10c. California light amber, 8.5c. All grades of extracted honey are in fair demand. Beeswax is in fair demand at \$32 per 100 pound. These are our selling prices, not what we are paying.

C. H. W. WEBER & CO.

BOSTON, Jan. 28.—Fancy and No. 1 white comb honey, 15@16c. Fancy white extracted, 10@11c. Beeswax, 30c.

BLAKE-LEE CO.

NEW YORK, Jan. 27.—There is practically no change in the market; that is, as far as comb honey is concerned. Fancy white is in fair demand only, while all other grades are dragging, and for the time being we can not encourage consignments or shipments. We quote, fancy white, 15c; No. 1 at from 13@14c; all other grades, such as No. 2, white, mixed, and buckwheat, at from 9@10c, according to quality. Extracted honey is in good demand, principally for white stock, which is rather scarce, while there is a sufficient supply of lower grades and dark.

We quote, white clover and basswood at from 9@10c; light amber at from 8@9c; mixed and buckwheat at from 6@7c; West India and Southern, average quality, at from 7@7.5c per gallon; Southern light color, at from 8@8.5c per gallon. Beeswax quiet, at from 29@30c.

HILDRETH & SEGELKEN.

DENVER, Jan. 27.—Demand for honey is light; prices are well maintained, however, especially on first-class extracted. Our jobbing quotations are as follows: Strictly No. 1 white, per case of 24 sections, \$3.60; No. 1 light amber, \$3.38; No. 1, \$3.15. Extracted, white, 9c; light amber, 8@8.5c; strained, 6@7.5c. We pay 25@26c for clean yellow beeswax delivered here.

THE COLO. HONEY-PRODUCERS' ASS'N.

F. Rauchfuss, Mgr.

ZANESVILLE, OHIO, Jan. 28.—Local jobbing houses are fairly well stocked at the present time, in view of the slack demand for honey that always follows the Holidays. Prices are about as last quoted. Except in glass retail packages, for which there is a fair demand, there is not much call for extracted honey. Producers are offered for beeswax 28c cash, 30c in trade.

EDMUND W. PEIRCE.

Increase Your Honey Crop

By introducing some of OUR

Famous Honey-Queens.

Some of our Colonies produced 250 lbs. of Surplus Honey the past season. No better bees in the World.

Will sell Queens the following prices, May to Nov.

Untested Queen, \$1.00; 6 for \$5.50. Tested, \$1.50; 6, \$8.50. BREEDERS, \$5.00 to \$10.00 each. 25 years' experience in Queen-Rearing.

Fred Leininger & Son,

2Atf DELPHOS, OHIO.

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CINCINNATI

The advantages of ordering your supplies from us are many.

1st.—WE CAN DELIVER goods in much less time than dealers located at small local points.

2d.—You pay only minimum freight or express charges from our place. No dealer is better situated than we are to save you transportation charges.

3d.—We carry large, well assorted stocks of all standard Bee-Supplies. We sell ten to twenty carloads annually, and, by purchasing for cash, we secure the lowest possible prices, and can give our customers every possible consideration.

4th.—OUR LONG ACQUAINTANCE with the needs of bee-keepers enables us to keep on hand large stocks

of standard goods. Our business was founded many years ago; and in connection with the line we now handle manufactured at Medina, Ohio, we have the confidence of bee-keepers in a measure enjoyed by but few supply houses.

5th.—OUR SUCCESS AS DEALERS in Bee-Keepers' Supplies, and in Honey, Seeds, and other merchandise, is due to the scrupulous care we exercise in the handling of all inquiries and orders. We give prompt attention to all requests for information on bee-keeping generally, to any request for prices on supplies needed, as well as probable time it would require to deliver goods. We solicit your inquiries and orders.

CATALOG.—Our new Catalog for 1911 is ready for mailing. If you have not already received one, and want a Catalog at once, send us a request. All customers of 1910 will receive a copy as soon as we can mail it, without request.

If you are in want of a Catalog at once, please give us the names of any other bee-keepers in your vicinity who would likely be interested. We shall appreciate the favor; and when opportunity offers we shall reciprocate the same. REMEMBER THAT WHATSOEVER YOU DO FOR US WILL NOT BE OVERLOOKED HERE, AND YOUR OWN INTERESTS WILL BE ADVANCED BY THE SAME.

Ask for our Catalog of Poultry Supplies.

C. H. W. Weber & Co., Cincinnati, Ohio.

Is your crop of White Clover Honey short? We can furnish you with

ALFALFA HONEY

Both White and Water-White. Finest Quality. Prices quoted by return mail, and Shipments made Promptly.

— Beeswax Worked for You Into —

DADANT'S FOUNDATION

— Best by Test. Let us send you Proof. —

Beeswax wanted for Cash or in Exchange for **Bee-Supplies**

Early Order Discounts now offered for Cash.

Satisfaction Always Guaranteed.

DADANT & SONS, Hamilton, Illinois.

“The Only Bee-Supply House in the Business Section of Chicago.”

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At the Sign of the Four Bee-Thermometers.

Our branch is just west of the new Northwestern depot and a little northwest of the Union Station. Every other depot is within convenient walking distance. Surface and elevated cars are almost right at our door. When you are in Chicago you do not have to waste a lot of time riding away out into the residence section of the city for your supplies as formerly—but just drop into the “falcon” Branch, “at the sign of the four bee-thermometers;” make it your headquarters; have your mail sent in our care; and when you are ready to go home, you can step right from our place to the depot with your bundles. The relief from lugging such Supplies as you wish to carry home with you all around the city in crowded cars will be appreciated by all bee-keepers who have been accustomed to visiting Chicago. Drop in “at the sign of the four bee-thermometers” at any time, whether you wish to purchase or not. Mr. George W. York, our office manager, will be glad to see you and talk bees with you.

Letters are answered and freight and express shipments sent the day the order is received.

A clean stock, fresh from the saws of the factory, has just been received—Hives, Sections, Foundation, Smokers, Extractors—everything for the bee-keeper.

“falcon” quality goods are not equalled—why buy others when they are better and cost no more?

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